

June 7, 2021

ADDENDUM NO. 1



RE: Sports Court Rehabilitation
Kanawha County Commission
Shawnee Sports Complex
2000 WV State Route 25, Institute, WV
Architect's Project No. 20066

TO: Prospective Bidders

FROM: ZMM, Inc. Architects and Engineers

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents.

ATTACH THIS ADDENDUM TO THE FRONT COVER OF THE PROJECT MANUAL AND ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE BID FORM.

PART 1 - INFORMATION FOR BIDDERS

- A. Pre-Bid Meeting Sign-In Sheet dated June 2, 2021 is attached to this Addendum.
- B. Each Bid shall be accompanied by a bid bond meeting the following:
 1. 5% Bid Bond - A Certified Check, made payable to the Kanawha County Commission, or satisfactory Bid Bond, executed by the bidder and acceptable sureties in an amount equal to five percent (5%) of the bid amount must be submitted with each bid.
 2. Bid Bond, in lieu of a Certified Check specified above, is to be issued by an A.M. Best, A- or better rated surety company listed on the most current Federal Register, Circular 570, and authorized to do business in the state of West Virginia, and signed or cosigned by a resident state agent. Should the Bidder refuse to enter into a contract with the Owner on the terms stated in the Bidding Documents or fail to furnish bonds covering faithful performance of the Contract and all obligations arising thereunder, the full amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty.
 3. The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until one of the following:
 - a. The Contract has been executed and bonds have been furnished.
 - b. All Bids have been rejected.
- C. A one hundred percent (100%) Performance Bond and a one hundred percent (100%) Payment Bond are required to be submitted to the Kanawha County Commission by the successful bidder prior to the release of the Contract.

Blacksburg
200 Country Club Drive SW
Plaza One, Building E
Blacksburg, Virginia 24060
540•552•2151

Charleston
222 Lee Street West
Charleston, West Virginia 25302
304•342•0159
www.zmm.com

Martinsburg
5550 Winchester Avenue
Berkeley Business Park, Suite 5
Martinsburg, West Virginia 25405
304•342•0159

PART 2 - CHANGES TO SPECIFICATIONS

- A. ADD Bid Form dated 06/02/21 as attached to this Addendum.
- B. ADD Section 129300 “Site Sports Equipment” as attached to this Addendum.
- C. REPLACE Section 131260 “Outdoor Aluminum Bleachers” dated 03/26/21 with Section 131260 dated 06/02/21 as attached to this Addendum.

END OF ADDENDUM

Attachments: Pre-Bid Meeting Sign-In Sheet..... 1 page
Bid Form dated 06/02/212 pages
Section 129300 “Site Sports Equipment”5 pages
Section 131260 “Outdoor Aluminum Bleachers”.....9 pages

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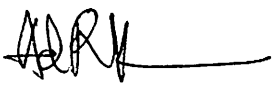
PRE-BID MEETING SIGN IN SHEET – Kanawha County Commission

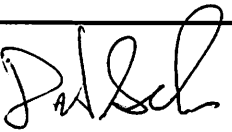
Shawnee Sports Complex Pickleball / Basketball Courts _____

PRE-BID MEETING : _____^{2nd} June 2021 _____ 10:00am _____ Shawnee Park
day month date year time AM PM location

SIGNATURE	PRINT NAME	NAME OF COMPANY ADDRESS STATE, ZIP CODE	PHONE – FAX - EMAIL	
	Nikki Sydnor	Wiseman Const. Co Inc	(area code) PHONE NO.	304-344-1200
		1616 6th Avenue	(area code) FAX NO.	304-344-1281
		Charleston WV 25387	EMAIL	jlink@wisemancorp.com awiseman@wisemancorp.com

	DAVID R. BALDWIN	AGSTEAL CONSTRUCTION	(area code) PHONE NO.	304-343-5400
		1700 ST RT 34	(area code) FAX NO.	304-343-0063
		HURRICANE WV 25526	EMAIL	dbaldwin@agstecconstruction.com

	ADAM R. KRASON	ZMM ARCHITECTS AND ENGINEERS	(area code) PHONE NO.	304.342.8159
		222 LEE STREET WEST	(area code) FAX NO.	304.345.8144
		CHARLESTON, WV 25302	EMAIL	ARK@ZMM.COM

	Daniel Shamblin	Daniels Building Corp	(area code) PHONE NO.	304 552 5744
		4855 Middle Fork Rd	(area code) FAX NO.	304 984 2363
		Advent Wv 25231	EMAIL	Danielscorp@mail.com

The above personnel attended the referenced Pre-Bid Meeting

			Phone	Fax
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BID FORM

Dated: _____
(Bidder to insert date bid submitted)

SUBMITTED BY:

_____ (hereinafter called "Bidder")

West Virginia Contractor's License Number: WV _____

SUBMITTED TO:

KANAWHA COUNTY COMMISSION (hereinafter called "Owner")

The Bidder, being familiar with local conditions affecting the cost of the Work and the Contract Documents, including Instructions to Bidders, Bid Form, General Conditions, Drawings, Specifications, and any Addenda or Clarifications issued, hereby propose to furnish all material, labor, tools, taxes, transportation and expendable equipment necessary for the satisfactory and complete installation of

**Sports Court Rehabilitation
Shawnee Sports Complex
West Virginia State Route 25,
Institute, West Virginia**

in every detail and ready for operation, all in full accordance with, and in conformity to, the Contract Documents, for the stipulated sums as follows:

The Undersigned Bidder Agrees:

1. To accept the provisions of all sections of the documents listed above.
2. That the amounts stated in this Form of Proposal represents the entire cost of the work. The completion time stated represents the entire time for performance of the work. The amount bid includes allowances for all fees for permits, regulatory notifications, taxes, and insurance required or applicable to the work. That no claims shall be made for any increases in wage scales or material costs.
3. To certify that this bid is genuine and not sham or collusive or made in the interest or in behalf of any person not herein named, and that the undersigned has not directly or indirectly induced or solicited any other bidder to put in a sham bid, or any other person, firm or corporation to refrain from bidding and that the undersigned bidder has not in any manner sought by collusion to secure for himself an advantage over any other bidder.
4. That the bidder shall comply with all City, County, State, and Federal statutes relating to liability insurance, working hours, minimum wages, safety and sanitary regulation, including requirements set forth governing federal participation under this project, which in any way may affect those engaged or employed on the work in the event that the award of the Contract is made on the bid herein submitted.

Submitted by: _____
(Firm Name)

BASE BID:

For the sum of: _____
_____ (\$ _____).

The undersigned Bidder proposes and agrees hereby to commence the Work of the Contract Documents on a date specified in a written Notice to Proceed to be issued by Architect, and shall achieve substantial completion within _____ days of the date of Owner's Notice to Proceed. (Bidder to propose number of days).

Accompanying this proposal is a bid bond in the amount of _____
_____ (\$ _____), payable to the Owner, which it is agreed shall be retained as liquidated damages by the Owner if the undersigned fails to execute a contract in conformance with the Form of Contract, and to furnish a Surety Company Bond in a penal sum equal to at least the full contract sum with ten (10) days after notification of award of the contract to the undersigned.

The Bidder certifies that this bid has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this bid with any other bidder or with any competitor. The Bidder agrees that the Owner reserves the right to reject any or all bids, and to waive any formalities in the bidding. The Bidder agrees that this bid shall be good and may not be withdrawn for a period of 60 days.

The Bidder acknowledges receipt of the following Addenda: (Please list by number and date.)

SIGNATURE OF BIDDER:

Firm: _____ By: _____

Print or Type Name of person authorized to sign contract on behalf of Bidder: _____

Address: _____ Title: _____

Address: _____ Phone: _____

Address: _____ Fax: _____

Tax Cert. #: _____

END OF BID FORM

SECTION 129300 - SITE SPORTS EQUIPMENT

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. Tennis Court Construction
 - 2. Pickleball Court Construction.
 - 3. Basketball Goals to match existing.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each exposed product and for each color and texture specified.
- C. Samples for Initial Selection: For units with factory-applied finishes.
- D. Samples for Verification: For each type of exposed finish, not less than **6-inch- (152-mm-)** long linear components and **4-inch- (102-mm-)** square sheet components.
- E. Product Schedule: Use same designations indicated on Drawings.

1.4 INFORMATIONAL SUBMITTALS

- A. Material Certificates: For site furnishings manufactured with preservative-treated wood.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For site furnishings to include in maintenance manuals.

PART 2 - PRODUCTS

2.1 TENNIS COURT EQUIPMENT

- A. Tennis Nets

1. Manufacturer: Douglas Industries, 800.553.8907.
2. Model: No. TN-36 with side pockets and wooden dowels.
3. Quantity: One set per Court.

B. Net Posts and Sleeves

1. Manufacturer: Douglas Industries, 800.553.8907.
2. Model: DTP-37 Green, 3" O.D., with net lacing, 3/16" Steel Wall, with ground sleeves.
 - a. Include Cable and Ratchet Winch.
3. Quantity: One set per Court.

C. Line Markings for Tennis and Pickleball Courts

1. Line markings shall be Plexipave HI-Hide Plexicolor Line Paint. Apply in strict accordance with manufacturer's specifications and instructions.
2. Unless otherwise noted, tennis lines shall be white.
3. The lines shall be masked on both sides with an acceptable tape. Each measurement shall be accurately set to within 1/8" tolerance in accordance with the American Sports Builders Association (ASBA). Each court area shall be marked for doubles play.
4. All areas that have overlapped in color shall be corrected and non-appearing. All overspray in excess shall be corrected and non-appearing. No spraying shall be done with the wind factor above seven (7) mph.

2.2 PICKLEBALL COURT EQUIPMENT

A. Pickleball Nets

1. Manufacturer: Wilson Pickleball Net
2. Model: 31" high Tournament Net with side pockets and wooden dowels.
3. Quantity: One set per Court.

B. Net Posts and Sleeves

1. Manufacturer: Wilson
2. Model: Model 3441W Green, 3" O.D., with net lacing, 3/16" Steel Wall, with ground sleeves.
 - a. Include Cable and Ratchet Winch.
3. Quantity: One set per Court.

2.3 BASKETBALL GOALS

- A. Subject to compliance with requirements, provide products by one of the following:

1. Draper, Inc.
2. Porter Athletic Equipment Company
3. Jaypro Sports, Inc.
4. Performance Sports Systems.
5. Arizona Courtlines, Inc.
6. IPI by Bison, Inc.

B. Basketball posts, backboards, goals, and nets to match existing.

2.4 CONCRETE MATERIALS

A. Cementitious Materials:

1. Portland Cement: ASTM C 150/C 150M, Type I.
2. Fly Ash: ASTM C 618, Class C or F.
3. Slag Cement: ASTM C 989/C 989M, Grade 100 or 120.
4. Blended Hydraulic Cement: ASTM C 595/C 595M, Type IS, portland blast-furnace slag cement.

B. Normal-Weight Aggregate: ASTM C 33/C 33M, 1-1/2-inch (38-mm) nominal maximum aggregate size.

C. Fine Aggregate: Sand graded as follows:

Sieve Size	Percent Passing by Weight
3/8 inch (9.5 mm)	100
No. 4 (4.75 mm)	95-100
No. 16 (1.18 mm)	45-80
No. 50 (300 μm)	10-30
No. 100 (150 μm)	2-10

- a. Free of materials with deleterious reactivity to alkali in cement.

D. Air-Entraining Admixture: ASTM C 260/C 260M.

E. Chemical Admixtures: Certified by manufacturer to be compatible with other admixtures and that do not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.

1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
2. Retarding Admixture: ASTM C 494/C 494M, Type B.
3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
4. High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.
5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.
6. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.

- F. Water: ASTM C 94/C 94M.

2.5 FABRICATION

- A. Metal Components: Form to required shapes and sizes with true, consistent curves, lines, and angles. Separate metals from dissimilar materials to prevent electrolytic action.
- B. Welded Connections: Weld connections continuously. Weld solid members with full-length, full-penetration welds and hollow members with full-circumference welds. At exposed connections, finish surfaces smooth and blended, so no roughness or unevenness shows after finishing and welded surface matches contours of adjoining surfaces.
- C. Pipes and Tubes: Form simple and compound curves by bending members in jigs to produce uniform curvature for each repetitive configuration required; maintain cylindrical cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of handrail and railing components.
- D. Exposed Surfaces: Polished, sanded, or otherwise finished; all surfaces smooth, free of burrs, barbs, splinters, and sharpness; all edges and ends rolled, rounded, or capped.
- E. Factory Assembly: Factory assemble components to greatest extent possible to minimize field assembly. Clearly mark units for assembly in the field.

2.6 GENERAL FINISH REQUIREMENTS

- A. Appearance of Finished Work: Noticeable variations in same piece are unacceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.7 STEEL AND GALVANIZED-STEEL FINISHES

- A. Powder-Coat Finish: Manufacturer's standard polyester, powder-coat finish complying with finish manufacturer's written instructions for surface preparation, including pretreatment, application, baking, and minimum dry film thickness.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with manufacturer's written installation instructions unless more stringent requirements are indicated. Complete field assembly of site furnishings where required.

- B. Install site equipment level, plumb, true, and securely anchored positioned at locations indicated on Drawings.
- C. Post Setting: Set cast-in support posts in concrete footing with smooth top, shaped to shed water. Protect portion of posts above footing from concrete splatter. Verify that posts are set plumb or at correct angle and are aligned and at correct height and spacing. Hold posts in position during placement and finishing operations until concrete is sufficiently cured.
- D. Posts Set into Voids in Concrete: Form or core-drill holes for installing posts in concrete to depth recommended in writing by manufacturer of site furnishings and 3/4 inch (19 mm) larger than OD of post. Clean holes of loose material, insert posts, and fill annular space between post and concrete with nonshrink, nonmetallic grout or anchoring cement, mixed and placed to comply with anchoring material manufacturer's written instructions, with top smoothed and shaped to shed water.
- E. Pipe Sleeves: Use steel pipe sleeves preset and anchored into concrete for installing posts. After posts have been inserted into sleeves, fill annular space between post and sleeve with nonshrink, nonmetallic grout or anchoring cement, mixed and placed to comply with anchoring material manufacturer's written instructions, with top smoothed and shaped to shed water.
- F. Concrete for posts to be of 4000 psi compressive strength in 28 days of curing. Concrete is to be maintained at a minimum temperature of 40 degrees F during mixing, pouring, and thereafter for 24 hours.
 - 1. Comply with ACI 301.
 - 2. Allow proper curing of concrete before applying any net and goal loads.

3.3 PROTECTION AND INSPECTION

- A. Verify proper position and configuration of all items. Make corrections as required.
 - 1. Verify proper height of nets at court center and adequate anchorage of nets at corners.
- B. Clean work areas and dispose of all trash and debris.
- C. Clean all installed items and remove temporary protective coatings.

END OF SECTION

SECTION 131260 - OUTDOOR ALUMINUM BLEACHERS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes complete services to provide visitor grandstand bleachers seating system of size, capacity, and features as indicated on the drawings. Include structural support systems and the following:
 - 1. Permanent bleacher seating system with framing to be anchored to existing concrete pad.
- B. Complete Scope of Work in this bid package includes the following:
 - 1. Bleachers configured as indicated on Drawings.
 - 2. Fully Closed Slip Resistant Deck
 - 3. Powder Coated Risers
 - 4. Anodized Coated Seatboards
 - 5. Slip Resistant Decking – Factory Blasted Finish Understructure
 - 6. Guard-railing and Hand-railing.

1.3 DEFINITIONS

- A. Bleacher: Non-elevated or elevated, tiered stand of benches to provide seating at a sports ground.
- B. Grandstand: Elevated, permanent, tiered stand of benches and chairs to provide seating at a sports ground.
- C. Engineer: Professional Engineer registered in the state of West Virginia hired by either the Contractor or the aluminum bleacher manufacturer, and who is responsible for providing the structural design of the complete aluminum bleacher assembly as specified herein.

1.4 REFERENCES

- A. International Building Code 2012
- B. AISC Manual, 13th Edition
- C. Aluminum Association of America
- D. Federal Handicap Legislation

Shawnee Sports Complex
Sports Court Rehabilitation
Institute, Kanawha County, West Virginia

- E. ADA, DOJ Standards for Accessible Design (2010)

1.5 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Subject to compliance with the International Building Code, Grandstand system shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
 - 1. Wind Loads: Determine loads based on the following minimum design wind pressures:
 - a. Uniform pressure as required by local authorities having jurisdiction.
 - 2. Snow Loads: As required Building Code for local jurisdiction.
 - 3. Live Loads: 100 psf gross horizontal area.
 - 4. Perpendicular Sway Load: 10 lbs. / linear ft. of seat plank.
 - 5. Lateral Sway Load: 24 lbs. / linear ft. of seat plank.
 - 6. Live Load for Seat and Tread Planks: 120 lbs. / linear ft. to seats and footboards.
 - 7. Top Rails of Guardrails:
 - a. Uniform load of 50 lbs. / ft. applied in any direction.
 - b. Concentrated load of 200 lbs. / ft. applied in any direction.
 - c. Uniform and concentrated loads need not be assumed to act concurrently.
 - 8. Infill of Guardrails:
 - a. Concentrated load of 50 lbs. / ft. applied horizontally on an area of 1 sq. ft.
 - b. Infill load and other loads need not be assumed to act concurrently.
- B. Manufacturer shall be a licensed member of AISC. To ensure quality and workmanship, all detailing, fabrication, and installation of grandstands and bleachers shall be in accordance with AISC specifications and requirements.
- C. Thermal Movements: Provide bleachers that allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures by preventing buckling, opening of joints, overstressing of components, failure of connections, and other detrimental effects. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
 - 1. Temperature Change (Range): 120 deg F, ambient; 180 deg F, material surfaces.
- D. Shop Connections: Welded and capable of carrying stress put upon them.
- E. Welding: Comply with AWS Standards.

1.6 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

Shawnee Sports Complex
Sports Court Rehabilitation
Institute, Kanawha County, West Virginia

- B. Delegated-Design Submittal: For bleachers.
 - 1. Include analysis data indicating compliance with performance requirements and design data signed and sealed by the qualified professional engineer licensed in the State of West Virginia responsible for their preparation.
 - 2. Aluminum bleachers are to be supported on and anchored to an existing concrete pad. Existing concrete pad is to be evaluated by Contractor's licensed engineer noted above and engineer is to certify the suitability of concrete pad.
 - a. Should the Engineer conclude that the existing concrete pad is not suitable for the support of the aluminum bleachers, including all loads to be supported by the aluminum bleachers, Contractor is to contact Architect and Owner for direction.
- C. Shop Drawings: Complete detailed drawings prepared, signed and sealed by a Registered Professional Engineer (P.E.) licensed in the State of West Virginia.
- D. Shop Drawings are to Include the following:
 - 1. Detailed and dimensioned plans.
 - 2. Seating plan indicating aisles, walkways, seating sections and exits.
 - a. Show exit calculations using appropriate tables and requirements of the building code.
 - b. Sections and details showing complete methods of assembly and anchorage.
 - 1) Show riser heights and platform widths.
 - 2) Show stair and ramp sections including guard railings and hand railings.
 - 3) Show overall sections showing railings and guards, sightlines and ADA compliant seating sightlines.
 - c. Any deviations from the bid documents shall be clearly identified in the shop drawing submittal. Final approval of construction documents is the sole responsibility of Architect.
 - d. Engineering calculations.
- E. Qualifications of design engineer who seals the shop drawings and calculations.
- F. Samples for Verification: For exposed finishes, in manufacturer's standard sizes
- G. AISC Certified Welding certificates will be provided with approval drawings.
- H. Maintenance Data: For control booths to include in maintenance manuals.
- I. Warranty: Sample of standard 5-year warranty will be provided with approval drawings.

1.7 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Engage a firm experienced in manufacturing grandstand structures similar to those indicated for this Project and that have a minimum 10 years of existence and experience and a record of successful-in-service performance.
 - 1. Manufacturer's responsibilities include providing professional engineering services for designing bleachers to comply with performance requirements.
 - 2. Manufacturer shall provide document of AISC certification.
 - 3. Manufacturer shall provide documented proof of existence with incorporation records from Secretary of State.
- B. Installer Qualifications: Engage an experienced Installer to perform the work of this Section who has specialized in installing types of bleachers similar to those required for this Project and who is acceptable to, or certified by, the manufacturer.
- C. Professional Engineer Qualifications: A professional engineer who is legally authorized to practice in the State of West Virginia and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of grandstands and bleachers that are similar to that indicated for this Project in material, design, and extent.
- D. Source Limitations: Obtain bleachers through one source from a single manufacturer.
- E. Product Options: Drawings indicate size, profiles, and dimensional requirements of grandstands and bleachers and are based on the specific system indicated. Refer to Division 1 Section "Product Requirements."
 - 1. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If modifications are proposed, submit comprehensive explanatory data to Architect for review.
- F. Welding: Qualify procedures and personnel according to AWS D1.2, "Structural Welding Code--Aluminum."
- G. Regulatory Requirements: In addition to local governing regulations, comply with applicable provisions in International Building Code.
- H. Accessibility Requirements: In addition to local governing regulations, comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act Architectural Guidelines (ADA), Accessibility Guidelines (ADAAG)."
- I. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- J. Safety Glass: Category II materials complying with testing requirements in 16 CFR 1201.
- K. Pre-installation Conference: Conduct conference at Project site.

Shawnee Sports Complex
Sports Court Rehabilitation
Institute, Kanawha County, West Virginia

1.8 COORDINATION

- A. Coordinate installation of anchorages and interfaces with other construction, including press box. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts and items with integral anchors that are to be embedded in concrete.
- B. Coordinate interfacing Work covered in other sections.

1.9 WARRANTY

- A. Special Warranty: Manufacturer's standard 5-year warranty is required in which manufacturer agrees to repair finish or replace components that fail in materials or workmanship within specified warranty period. If warranty listed below is not the standard advertised warranty provided by manufacturer, a special warranty satisfying the listed requirements will be provided with bid submission.
- B. Warranty: Product shall be guaranteed for five (5) years on the structure and five (5) years on the finish together with labor. Damage resulting from abnormal use, vandalism, or incorrect installation (if done by other than authorized installer of the manufacturer) is not applicable.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Basis-of-Design: Southern Bleacher Company, 801 Fifth Street, Graham, TX - Contact: Jeff Dickinson (800) 433-0912.
- B. Additional acceptable manufacturers:
 - 1. Dant Clayton Corporation
 - 2. E&D Specialty Stand, Inc.
 - 3. GT Grandstands.
 - 4. Outdoor Aluminum, Inc.
- C. Other named manufacturers whose products meets structural requirements and complies with the contract drawings for plan, section and configuration, but differs significantly in design or primary materials shall submit information to the architect during bidding for acceptance according to same criteria as "Additional Manufacturers" in paragraph 2.1-B.
- D. Specification Requirements: Some of the specification requirements of this Section may be a higher level than the "standard" even for the basis of design manufacturer. Where such differences occur, the higher level requirement shall be provided (applicable to all manufacturers).

2.2 MATERIALS

- A. Materials:
 - 1. Steel: ASTM A 36, ASTM A 992.

OUTDOOR ALUMINUM BLEACHERS

Shawnee Sports Complex
Sports Court Rehabilitation
Institute, Kanawha County, West Virginia

2. Aluminum: Extruded alloy 6063-T6.
 3. Accessories:
 - a. Steel Connections: ASTM A 307, galvanized.
 - b. Aluminum Components: ASTM A 307, cadmium plated.
 - c. Hold-Down Clip Assembly and End Caps: Aluminum Alloy 6063-T6.
- B. Steel Members:
1. Stringer and pier spacing as per Contractor's engineering design.
- C. Aluminum Seat boards: Nominal 2 inches by 10 inches, extruded aluminum with minimum wall thickness of 0.078 inches. Matching aluminum end caps shall be furnished at aisles and ends of bleacher. All steel surfaces in contact with aluminum seats shall be treated to prevent electrolytic action. Seat boards shall be secured to their steel supports by means of extruded aluminum clips and 5/16-inch-diameter bolts. All splices shall occur at seat steel supports. Splices in other locations will not be permitted.
- D. Aluminum Footboards: Size per component requirements, non-slip aluminum planks made of 6063-T6 aluminum alloys with minimum wall thickness of 0.078 inches. Footboards shall be secured to their steel supports by means of extruded aluminum clips and 5/16-inch-diameter bolts. All splices shall occur at steel supports. Splices in other locations will not be permitted.
- E. Tongue and Groove Decking
1. The tread system shall be comprised of aluminum extrusions which fit together lengthwise in a male-female shape running the length of the planks. This tongue and groove mechanism will minimize deflection and not separate due to loads being applied to individual planks. The locking mechanism by design shall allow for expansion and contraction of individual planks without effecting performance of the system.
 2. The system shall cause the deck planks to react together at all treads and cross walks to live load and form the appearance of a single tread system. By design, this system forms a solid, overlapping tread and riser installation.
 3. The nose extrusion shall allow for a 1" extruded aluminum contrasting nose piece to be flush mounted on the leading edge and shall capture the vertical riser plank in an extruded pocket. The heel extrusion shall have a .70" vertical lip at the rear of the plank to allow for placement of vertical riser plank.
 4. These extrusions shall be such that the attachment of the seat brackets, step brackets, mid-aisle rails and all other components is accomplished without deck penetrations. The system shall allow for seat and aisle reconfiguration at any time without evidence of its previous configuration.
 5. Entry stairs to be 2 x 12 mill finish aluminum with inset extrusion to accept contrasting nosing member.
 6. Ramp planks to be interlocking to resist deflection of live loads.
 7. Open ends of planks to be covered with anodized aluminum end caps, securely fastened to the plank.
 8. Joint sleeves: Dual joint sleeves to be inserted at each butt joint of each load bearing aluminum plank, and to penetrate 6 inches into each plank at the joint. Joint sleeves are not required at secondary gutter locations.

Shawnee Sports Complex
Sports Court Rehabilitation
Institute, Kanawha County, West Virginia

- F. Aluminum Risers: Aluminum planks made of 6063-T6 aluminum alloys with minimum wall thickness of 0.078 inches. Provide continuous aluminum riser closures between all footboards. Risers shall be secured with seat brackets or hold down clips. Through bolting or drilling of the riser board is unacceptable. Risers shall be of lengths similar to treads.
- G. Stairs: 2-by-12 inch aluminum treads with maximum 7-inch rise. Tread shall be made to accept aluminum contrasting aisle nosing at each leading edge. Nosing shall be mechanically fastened with aluminum pop rivets.
- H. Guardrail Systems – Three lines of aluminum pipe railing are required:
 - 1. Extruded Structural Pipe and Round Tubing: ASTM B 429/B 429M, Alloy 6063-T6.
 - 2. Provide Standard Weight (Schedule 40) pipe unless otherwise indicated.
 - 3. Castings: ASTM B 26/B 26M, Alloy A356.0-T6.
 - 4. The guardrail system shall be of interlocking design with positive through bolt fastening. The top rail shall be designed to fully cover the rail support posts for a totally snag-free area and eliminate the potential of sharp edge contact with the spectators.
 - 5. Grab-rails shall be extruded aluminum pipe of 6063-T6 alloy, 1 - 15/16" O.D.
 - 6. Chain link fence shall be 2" mesh, 6 gauge black vinyl coated fabric.
 - 7. All guard railing shall be 42 inches above all walking or standing surfaces.
- I. Hardware and Seat Brackets: All connections for seat boards, guardrails, and guardrail pipe shall be galvanized bolts and aluminum hold down clips. Footboard connections shall be made with galvanized fasteners and aluminum hold down clips. Seat brackets shall be mill finished aluminum. Seat bracket shall be attached to aluminum decking system with KL-nut. No holes or penetrations shall be permitted through the aluminum deck or risers.
- J. Bleacher Understructure: Manufacturer's standard hot-dipped galvanized steel. Painted steel is unacceptable. Anchor structure to existing concrete slab as per engineer/bleacher manufacturer's instructions.
- K. Finishes:
 - 1. Steel: Hot-dipped galvanized after fabrication in accordance with ASTM A 123.
 - 2. Aluminum:
 - a. Seat boards: Clear anodized aluminum.
 - b. Aluminum Footboards: Mill Finish with a slip resistant surface which consists of a repetitive series of serrations with ridges and valleys that enhance the walking surface.
 - c. Riser Boards: Dur-Kyn Kynar paint system (wet paint system).
- L. Component Requirements:
 - 1. Permanent Bleacher Seating System
 - a. Total Length of Bleacher: As shown on Drawings.
 - b. Number of Rows: Fourteen (14)
 - c. Seating capacity: As shown on Drawings.
 - d. Front Walkway elevation: 60".

Shawnee Sports Complex
Sports Court Rehabilitation
Institute, Kanawha County, West Virginia

- e. Front Walkway Width: 74 inches.
- f. Footboard Decking System: Tongue and Groove Deck.
- g. Riser height: 12"
- h. Tread depth: 24"
- i. Seat boards: Nominal 2 inches thick and 10 inches wide minimum.
- j. Guardrail System to be at Front, Back and Sides of seating and all exits.
- k. Handicapped Seating: As shown on Drawings.

2.3 FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved samples and are assembled or installed to minimize contrast.

2.4 ALUMINUM FINISHES

- A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
- C. Class I, Clear Anodic Finish: AA-M12C22A41 (Mechanical Finish: non-specular as fabricated; Chemical Finish: etched, medium matte; Anodic Coating: Architectural Class I, clear coating 0.018 mm or thicker) complying with AAMA 611.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for, installation tolerances, and other conditions affecting performance of work.
- B. Verify with Owner's testing company that foundation bearing conditions are in accordance with assumptions made in design calculations and Shop Drawings.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

Shawnee Sports Complex
Sports Court Rehabilitation
Institute, Kanawha County, West Virginia

3.2 ERECTION

- A. Install pre-engineered bleachers in accordance with manufacturer's instructions and final Shop Drawings. Provide accessories indicated or required and anchors, inserts and other items required for installation of units and attachment of adjoining construction.

3.3 FIELD QUALITY CONTROL

- A. Arrange for bleachers manufacturer's technical personnel to inspect bleachers and components during installation and at final completion and to certify compliance with requirements.
- B. Notify Architect 48 hours in advance of date and time of final inspection.

3.4 ADJUSTING AND CLEANING

- A. Clean installed bleacher units on exposed and semi-exposed surfaces. Touch-up shop applied finishes to restore damaged or soiled areas.

END OF SECTION