DOCUMENT 009000

ADDENDUM

ADDENDUM NO. [1] Date: October 5, 2018

- RE: GLENWOOD COMMUNITY SCHOOL DISTRICT ATHLETIC COMPLEX IMPROVEMENTS BID PACKAGE 2 400 SIVERS ROAD GLENWOOD, IOWA 51534 HSR PROJECT NO. 18005
- FROM: HSR Associates, Inc. 100 Milwaukee Street La Crosse, WI 54603 (608) 784-1830
- **TO:** Prospective Bidders

This addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated September 2018. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of [4] typed pages, pre-bid attendance, [1] revised Bid Form, [2] specification section, and [19] 30 x 42 drawings.

CHANGES TO BIDDING REQUIREMENTS, CONTRACT FORMS AND CONDITIONS OF THE CONTRACT:

- 1. Pre-bid attendance attached hereto.
- 2. Section 00 11 13 ADVERTISEMENT FOR BIDS
 - a. Delete second sentence. Grandstands are now included in this Contract.
 - b. At the second line, the alternate bid applies to the football field only and the alternate is for grass turf. Refer to Section 01 23 00 for alternate descriptions.
 - c. Delete reference to the existing bridge decking: That Work will be included in a future package.
 - d. Add the following scope of Work:
 - i. Artificial turf, installed, shall be included in the Bid Package 2 Contract Documents base bid. Turf specification and layout drawing attached hereto. System preparation is already included in documents.
 - ii. Include installation of new grandstand bleachers as part of the Contract Documents. Work includes, but is not limited to; preparation of grade, installation of foundations and concrete slab under grandstand system. Grandstand seating and storage areas as described in attached specification 13 34 16 and detailed on attached Drawings. Refer to Item 13 below for responsibility and contractor option for foundation installation.
- 3. Section 00 30 00 INFORMATION AVAILABLE TO BIDDERS (Geotechnical Report)
 - a. The 12 inches of over excavation and granular fill includes the 4 inches of granular fill referenced in Structural Drawings. The vapor barrier shall be installed directly under the slab so that the 12 inches of granular fill is under the vapor barrier.

4. Section 00 41 00 BID FORM

- a. Revised Bid Form attached hereto.
- 5. <u>Section 00 61 13 BONDS</u>
 - a. Construction amount for bonding purposes is 4.9 million.
- 6. Section 00 73 00 SUPPLEMENTARY CONDITIONS
 - a. 9.8.6: Change "60" to "30".
 - b. 11.2.1.1: Change "\$1000" to "\$2500".

CHANGES TO CONDITIONS OF THE CONTRACT:

- 7. Section 01 10 00 SUMMARY
 - a. 1.08, B: Change "July 1" to "August 1, 2019".
- 8. Section 01 23 00 ALTERNATES
 - a. Add; Alternate 10 as follows:
 - Alternate No. 10: MODIFIED BASE INSTALLATION UNDER TRACK

The following work shall be priced under Alternate No. 10: State the amount to be added to the base bid to install 12 inches of modified base under the gravel base at the track as specified in Division 31 and shown on Civil Drawings. Work includes but is not limited to removal and preparation of subgrade and installation of modified base. Gravel base shall be included in base bid.

- 9. Section 01 40 00 QUALITY REQUIREMENTS
 - a. 1.07: Delete Items A and B. The Owner will secure the services of a testing agency and surveyor to complete testing, inspections and staking.

CHANGES TO SPECIFICATIONS:

- 10. Section 05 31 00 STEEL DECKING
 - a. 2.02: Delete Item B. No acoustical deck required.
- 11. Section 07 54 30 KEE MEMBRANE ROOFING
 - a. 1.02: Delete Item A. There is no acoustical deck and no acoustical insulation is required.
 - b. 3.02: Delete Item A.
- 12. Section 13 34 16 PERMANENT GRANDSTANDS AND ENCLOSURES
 - a. Add section attached hereto to Contract Documents
- 13. <u>Section 32 18 23.29 SYNTHETIC FIELD SPORT SURFACING</u> a. Add section attached hereto to Contract Documents.

CHANGES TO DRAWINGS:

- 14. <u>Sheet C104R SITE LAYOUT PLAN (ATHLETIC SITE) BID PACKAGE 2</u> 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
 - b. Add new 8'W x 4'H double service gate at north end of running track adjacent to maze gate.
 - c. See keynotes 12, 12A, 12B, 12C for clarification of cast-in-place concrete retaining wall.
- 15. <u>Sheet C105R SITE GRADING PLAN (ATHLETIC SITE) BID PACKAGE 2</u> 30 x 42 attached hereto.
 - a. Revisions clouded on Drawing.
 - b. Install new drainage swale along north end of proposed middle school parking lot.
 - c. See new elevations for proposed box culvert along south end of bus drive adjacent to Sivers Rd.

- 16. Sheet C107R SITE EROSION CONTROL PLAN (ATHLETIC SITE) 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
 - b. Install erosion blankets along new drainage swale north of proposed middle school parking lot.
 - c. Install erosion blankets along both ends of proposed box culvert along Sivers Rd.
- 17. <u>Sheet C109R SITE UTILITY PLAN (ATHLETIC SITE) BID PACKAGE 2</u> 30 x 42 attached hereto
 - a. Modify storm structures MH#2, Inlet #1.
 - b. Box Culvert along Sivers Rd. shall be (2)- 5'x12' cells 75' long w/ wing-walls as manufactured by Hancock Concrete. Install per manufacturer's specifications.
 - c. Install 1" PE water lateral across football field area. Install (2)-1" quick couplers in 10" valve box. Connect to water supply in utility room under stadium bleachers.
 - d. Modify 4" foundation storm underdrain locations and connections around proposed restrooms under stadium bleachers and elevator area.
 - e. Proposed water service to stadium bleacher restrooms shall be 3" in lieu of 2".
- 18. <u>Sheet C111R SITE IRRIGATION PLAN (ATHLETIC SITE) BID PACKAGE 2</u> 30 x 42 attached hereto.
 - a. Modify field irrigation layout and connection point. Connect to utility room under stadium bleachers w/ 2.5" main, provide new irrigation controller. Install 4" sleeve under proposed running track and through front bleacher retaining wall. Coordinate sleeve installation with General site contractor.
 - Install new irrigation heads, control valves, and lateral lines in green space north of proposed Gateway Building. Install new 2.5" sleeve under proposed concrete pavement area. Install new 800MFR Watts 1.5" backflow preventer and connect to water supply. Install new irrigation controller, coordinate location of controller in utility room with building contractor along with installation of ½" sleeve for control wire.
- 19. Sheet A004R OVERALL SITE LAYOUT 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
 - b. Delete gate at dumpster enclosure at southwest corner of site.
- 20. Sheet A105 GRANDSTAND BLEACHER LAYOUT 30 x 42 attached hereto
 - a. Add Drawing as part of Contract Documents.
 - b. Drawing shows sections and elevation markers of grandstand piers and footings. Contractor shall coordinate bottom of footing elevations with current existing grade. It is Contractors option to install footings and piers prior to fill that is required at bleacher area. This would eliminate need to excavate fill to set footings. Coordinate with requirements of civil grading plan.
 - c. Grandstand supplier is responsible to confirm final design of piers and for design and construction of grandstand bleacher system from top of piers up.
- 21. <u>Sheet A201R PRESS BOX ELEVATIONS</u> 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
- 22. <u>Sheet A300R PRESS BOX BUILDING SECTIONS</u> 30 x 42 attached hereto.
 - a. Revisions clouded on Drawing.
 - b. Elevator shaft raised to accommodate required clearances.
- 23. Sheet A302R FIRST FLOOR STADIUM BUILDING SECTIONS 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
- 24. Sheet A303R WALL SECTIONS 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
- 25. <u>Sheet A304R WALL SECTIONS</u> 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.

- 26. Sheet A502R SECTION DETAILS 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
- 27. <u>Sheet A504R SECTION DETAILS and S200 GENERAL NOTES & TYPICAL DETAILS 30 x 42</u> attached hereto
 - a. Revisions clouded on Drawing.
 - b. The following question with answer is from the pre-bid:

Q: Restroom joist bearing described on structural in 12/S200. In 8/A504 should two courses of bond beam occur. In 9/A504 can joist bear at mid-height of bond beam?

A: Refer to revised details on A504R attached hereto.

- 28. Sheet A600 DOOR SCHEDULE AND FRAME ELEVATIONS
 - a. At aluminum frame elevations C and E, change glass type at speak-thru locations to GLT-4.
- 29. Sheet S100R FOUNDATION PLANS 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
- 30. Sheet S101R ROOF FRAMING PLANS 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
- 31. <u>Sheet S102R PRESS BOX FRAMING PLANS/DUGOUT PLANS</u> 30 x 42 attached hereto a. Revisions clouded on Drawing.
- 32. <u>Sheet S301R DETAILS</u> 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
 - b. The 2x Solid Blocking referenced in details between glulam framing shall be micro-lams of the same species as the glulam beams. Refer to Section 06 18 00, 2.03, C.
 - c. Detail 10S301R: Trellis framing shall be galvanized.
- 33. <u>Sheet S302 DETAILS</u> 30 x 42 attached hereto
 - a. Add Drawing as part of Contract Documents.
 - b. Locations of retaining wall sections will be referenced on Civil Drawings in forthcoming addendum.

PRIOR APPROVALS:

- 1. Section 07 92 00:
 - a. 2.05, C: SpecChem: SpecPoxy C.J.
 - b. 2.07, D: SpecChem: Rapid Flex CJ Control Joint Filler
- 2. Division 21: Sheet E300, Hand Dryer referenced on Equipment Connection Schedule: Saniflow Corp; Speedflow Plus.

END OF DOCUMENT 009000

ARCHITECTURE ENGINEERING 10/2 INTERIOR DESIGN Pre-Bid Gilenwood Athletic Complex Mame E-mail Company michelle Maland mm aland Chsrassociates. com HSZ" Lincoln epoxy flooring Lincolnepoxyflooring Awdersen Const Jay @Andersen const. com Comman Jennie Avila Jay Gunther Jay @ Andersen const. com (im Jess Bream Mid-Amerika Sports Construction jbream@astroTurf.com DAVE GILGEDWOOD HER GLOD greenwooddablemin.com ANDERSEN CONST MARK ANDERSEN MARK@ ANDERS (N CONST. 40M Brian Harris Nemaha Sports Const Brian Harris Gnematia Met MARK TRIVEly Maak Hughes Court Mktrivel @ quail con bachman f@glenwood schools. org GCSD FRANK BACHMAN R.O. YOUNER, INC Mike Eisenbarth mike evoyouker.com POR Scott GROIDSKY Scotte POBINC.Com Randy Rogge Rogge General rrogge@rogge inc. com Tom Bussay Rogge Grand thassey @ rogge inc.com mennel mechanne MIKE EMANDEL MECO-HENNE Jon Henne Jr Meco-Henne henne is a me cohenne. com BrikingsoerF BULLETABHOLDING. Conc TABLONSTR Deur Embray GCSD - emisray d @glewerod schools ing

www.hsrassociates.com

DOCUMENT 00 41 00

BID FORM (Revised)

BIDDER:_____

BID FOR SINGLE PRIME CONTRACT

PROJECT: GLENWOOD COMMUNITY SCHOOL DISTRICT ATHLETIC COMPLEX IMPROVEMENTS BID PACKAGE 2 400 SIVERS ROAD GLENWOOD, IOWA 51534 HSR PROJECT NO. 18005

TO: GLENWOOD COMMUNITY SCHOOL DISTRICT 103 CENTRAL STREET, Suite 300 GLENWOOD, IOWA 51534 ATTENTION: Devin Embray

BASE BID

The undersigned, having examined the site where the Work is to be executed and become familiar with local conditions affecting the cost of the Work and carefully examined the Project Manual, the Project Drawings, all other Bidding Documents and Addenda thereto prepared by the AE, HSR Associates, Inc., hereby agrees to provide all labor, materials, equipment and services necessary for the complete and satisfactory execution of the ENTIRE WORK, in the time frame stipulated in these contract documents, for the Base Bid stipulated sum of:

Dollars (\$	00)
ate the company providing the	for the following packages intended for product and cost . (This information is
Dollars (\$.00)
Dollars (\$.00)
	sum, stated above, includes work ate the company providing the ot be shared publicly): Dollars (\$

ALTERNATE BIDS

The undersigned further agrees to perform the alternative portions of the Work as described in the Project Manual, Section 01 23 00 Alternates, for the following additions to or deductions from the Base Bid sum stipulated above:

Alternate No. 1 Grass Turf I	nstallation at Football Field		
Deduct	Dollars (\$	00)	
Alternate No. 2 Modified Ba	se Installation at Artificial Turf System	L	
Add	Dollars (\$	00)	
Alternate No. 3 Parking and	Drive Concrete Pavement		
Add / Deduct	Dollars (\$.00)
Alternate No. 4 Parking and	Drive Lot Modified Base		
Add	Dollars (\$	00)	
Alternate No. 5 Running Tra	ack Concrete		
Add / Deduct	Dollars (\$.00)
Alternate No. 6 Exterior Cor	ncrete Modified Base		
Add	Dollars (\$.00)	
Alternate No. 7 Concrete at	Visitors Bleachers		
Add	Dollars (\$	00)	
Alternate No. 8 New Dugou	t <u>s</u>		
Add	Dollars (\$	00)	
Alternate No. 9 Baseball/So	ftball Field Fence Replacement		
Add	Dollars (\$	00)	
Alternate No. 10 Modified B	ase Installation Under Track		
Add	Dollars (\$	00)	
18005 Glenwood Bid Pkg 2	2 00 41 00-2		

UNIT PRICES

The undersigned agrees to add or deduct portions of the Work from the Contract as described in the Project Manual, Section 01 22 00 Unit Prices, for the following Unit Price amounts:

Α.	Unit Price UP-1:	(Excess Excavation)	
Pe	r cubic yard	Dollars (\$00	<u>)</u>
Β.	Unit Price UP-2:	(Compacted Modified Base)	
Pe	r cubic yard	Dollars (\$00))
C .	Unit Price UP-3:	(Exterior Concrete Flatwork)	
Pe	r square foot	Dollars (\$0)0)
D.	Unit Price UP-4:	(Gravel Base)	
Pe	r cubic yard	Dollars (\$00))
Ε.	Unit Price UP-5:	(Exterior Concrete Paving)	
Pe	r square foot	Dollars (\$()0)
F.	Unit Price UP-6:	(Remedial Floor Coating)	
Pe	r square foot	Dollars (\$0	00)

BIDDER'S CHOICE SUBSTITUTIONS

The following Bidder's Choice Substitution is proposed for your consideration subject to the requirements set forth in Document 00 22 13 Supplementary Instructions to Bidders, Subparagraph 3.3.4:

Substitution No. S1:		
For substituting		
		_
Type, Brand, Catalog No		
Manufacturer		
Deduct from BASE BID	Dollars (\$.00)

In submitting this Bid, the undersigned agrees to:

- 1. Hold this Bid open for **30** days.
- 2. Accept the provisions of Instructions to Bidders regarding disposition of Bid Security.
- 3. Enter into and execute an Agreement, if awarded on the basis of this Bid, and to furnish Performance and Labor and Material Payment Bonds according to the Supplementary Conditions.
- 4. Accomplish work according to the Contract Documents.
- 5. Complete the work by the time stated in Section 01 10 00 Summary of the Work.

Receipt of the following Addenda and inclusion of their provisions in this Bid is hereby acknowledged:

Addendum No._____ Dated_____

Addendum No._____ Dated_____

Addendum No._____ Dated_____

Addendum No._____ Dated_____

Attached hereto are the required:

- a. () Bid Security
- b. () Certificate of Organization and Authority
- c. () Non-Collusive Affidavit: An affidavit in proof that the undersigned has not entered into any collusion with any person in respect to this Bid or any other bid or the submitting of bids for the contract for which this bid is submitted.
- d. () Certification of Non-segregated Facilities

	FIRM NAME:
(Affix seal if Corporation)	Ву:
	Title:
	Ву:
	Title:
	Date:
	Official Address:
	Telephone:

END OF DOCUMENT 00 41 00

SECTION 13 34 16

PERMANENT GRANDSTANDS & ENCLOSURES

PART 1 - GENERAL

1.01 SYSTEM DESCRIPTION

- A. Provide labor, material, equipment and supervision necessary to complete installations of a permanent steel grandstand including the following:
 - 1. Galvanized Steel Substructure on Grandstand Structure
 - 2. Watertight Steel Footboard/Riser System on Grandstand
 - 3. Storage Enclosure Systems
 - 4. Design and Engineering of Concrete Foundations and Retaining Wall Systems for Grandstand
 - 5. Top Viewing Platforms for Grandstand & Decking for Press Box Wrap-around

1.02 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturers must have ten years of experience in the manufacture of bleachers and grandstands; welders must be AWS certified; manufacturing capability according to various code compliances.
- B. Installer Qualifications: Experienced in the proper installation of grandstands.
- C. Source Quality Control: Mill Test Certification.

1.03 SUBMITTALS

- A. Manufacturer's Product Data: Submit manufacturer's descriptive product data for project.
- B. Shop Drawings: Manufacturer to submit shop drawings signed and sealed by a licensed lowa structural engineer and schedules for type, location, quantity, and details of steel and aluminum components required for project including the concrete foundation and retaining wall designs. Manufacturer is responsible for providing architect with designs and engineering for any plan review process. Owner to be provided with "approved" set of documents for permanent records.

C. Certificates:

- 1. Insurance Certificate
- 2. Performance & Bid Bond (if required by contract documents)

1.04 SITE CONDITIONS

- A. Field Site:
 - 1. Owner to make site accessible.
 - 2. Owner to verify site locations, benchmarks.
- B. Underground Utility Line: Owner to clearly mark all underground utilities and obstructions and Owner to relocate all that conflict with grandstand.
- C. Soil Test Data: Chosen Valley Testing, Inc. report dated 4/26/18

1.05 BUILDING CODES

A. The Building Code that applies to this project is IBC 2015 & ICC 300-2012

1.06 WARRANTY

A. Permanent Grandstand and Enclosure Systems shall be under warranty for a period of (5) five years beginning at Date of Substantial Completion for Projects installed by Manufacturer. All products are warranted to be free from defect in materials and workmanship in the course of manufacture. This warranty excludes any other defects resulting from abnormal use in service, accidental or intentional damage or any occurrences beyond Manufacturer's control.

1.07 MAINTENANCE

A. Owner is to conduct annual inspection and required maintenance of grandstand to assure safe conditions. It is also recommended that a professional engineer or registered architect perform inspections biennially.

PART 2 - PRODUCTS

2.01 PERMANENT STEEL GRANDSTAND – HOME SIDE

- A. Product Description
 - 20 rows high x 192 feet long Capacity: 2038 seats (2020 bench seats + 18 ADA spots)
 - 2. Vertical columns must be placed per plans due to coordination with enclosures and build-outs underneath grandstand. Deviation from designed column spacing is not acceptable.
 - 3. Horizontal beams are wide flange beams.

- 4. Framing bays perpendicular to seating are free of cross bracing the total length of the home side grandstand to allow for underside buildout and enclosure systems.
- 5. Stringers are wide flange with steel angle rise and depth fabrication and are placed 6 feet on center.
- 6. Cover panels shall be provided on the grandstand framing across front, back and both ends using Kynar pre-finished metal panels. Cover panels shall be integrated into trim and flashing of enclosure system.
- 7. Front Grandstand Height and Mid-Walkway:
 - a. Front of stadium elevated 5 feet 6 inches above field grade
 - b. Mid-walkway: 9 feet wide elevated 8 feet above plaza grade
- 8. Entry stairs to be firmly anchored. (1) Stair provided on each end of midwalkway and (1) in center vomitory down to plaza grade. (8) Stairs also provided from mid-walkway to upper seating access aisles, as indicated on plans.
 - a. Stair rise: 7 inches per IBC Building Code with steel or aluminum closure.
 - b. Stair tread depth: 11 inches per IBC Building Code.
 - c. Guardrails on Stair to be 36 inches above leading edge of step with intermediate rail spacing at 22 inches.
 - d. Stairs to have handrail extension. The handgrip portion of handrails shall not be less than 1 1/2 inches or more than 2 inches in cross-sectional dimension or the shape shall provide an equivalent gripping surface. The handgrip portion of handrails shall have a smooth surface with no sharp corner. The top of handrails and handrail extensions shall be placed not less than 34 inches or more than 38 inches above the nosing of treads and landings. Handrails shall be continuous the full length of the stairs and shall extend in the direction of the stair run not less than 12 inches beyond the bottom riser. Ends shall be returned or shall terminate in newel posts or safety terminals.
- 9. Aisles:
 - a. Aisles with seating on both sides to have 36-inch high handrail with intermediate rail at approximately 22 inches above tread.
 - b. Anodized aluminum handrails with rounded ends are discontinuous to allow access to seating through a space 22 inches (min.) to 36 inches (max.).
 - c. Half steps shall provide equal rise and run throughout aisle. Each shall have aisle nosing with non-skid tape or black powder coat finish.

- 10. Footboard/Riser System:
 - a. Rise per row 12", depth per row 28". Due to coordination with press box design, this rise/run must be maintained.
 - b. Each seat 17 inches above its respective tread.
 - c. Footboard/Riser Arrangement:
 - (1) Home Side grandstand system shall be a closed deck to be constructed via a one-piece, galvanized steel tread and riser system resulting in a water-tight seal. The water-tight seal must be covered under the manufacturer's 5-year warranty described above. If steel decking system is proposed that does not achieve a water-tight seal, then a water-tight underside ceiling system must designed and provided by the grandstand manufacturer for entire footprint of stadium. Ceiling system must be supported by grandstand structure, not an independent support system. Detail must be provided to the Architect showing how the ceiling system will obtain the watertight seal and must be covered under the specified 5year warranty. Multiple-piece aluminum decking is not acceptable.
- 11. Home Side Enclosure Systems
 - a. Front enclosure system 5' high x 192' long with (5) roll-up doors, per plans. Enclosed spaces less than 1000 sq. feet.
 Front enclosure wall panels must match the same wall panels used on the plaza level enclosure walls.
 - b. (3) Enclosed spaces at plaza level, each less than 1000 sq. feet. Internal galvanized framing system and wall system using pre-finished metal panels enclosing each space.
 - c. (1) Enclosed plaza level space, indicated as Area # 1 on plans, to provide 1-hour fire separation using a UL-Listed wall and ceiling system for S-1 rated storage. Fire-rating system must be supplied by grandstand manufacturer/installer and must be approved by architect.
 - d. Galvanized framing system, utilizing pre-finished metal wall panels and trim manufactured by McElroy Metals or Pac-Clad. Wall panels to 26 ga. (min), corrugation pattern to be selected by architect. All wall panels and enclosure systems must be provided by grandstand manufacturer and must be supported by grandstand structure, not an independent support system. All wall panels to extend from bottom of grandstand framing system & cover panel to grade on all Wall panels to cover buildings sides of grandstand. underneath grandstand, grandstand manufacturer must coordinate with Architect and General Contractor when installing wall panels and framing once buildings are constructed. Grandstand manufacturer must provide design collaboration with Architect on wall panel openings to accommodate building openings.

- e. Roll-up and service doors provided in each enclosure area
- f. Provide number of roll-up and service doors as indicated on plans.
- 12. Guardrailing: To be at all sides of bleacher, entry stairs and ramps, portals, and landings. Railing to be vinyl coated or painted over galvanized steel with end plugs at ends of straight runs and/or elbows at corner. All guardrails shall be secured to angle rail risers by galvanized fasteners. Railing shall be at heights as required by code for its location on the Grandstand (see below note regarding guardrailing height at viewing platforms). Guardrailing shall include vinyl coated chain link fencing fastened in place with galvanized fasteners and aluminum ties. All guardrailing posts must be galvanized and then painted to match fencing fabric, painting over bare steel is not acceptable.
- 13. Top Viewing Platforms:
 - a. Grandstand manufacturer to provide 12 feet deep x 74 feet wide viewing platforms at the top of the stadium on each side of the press box. Decking system for the viewing platforms to be galvanized steel decking. Manufacturer responsible for support system for both platforms.
 - b. Platforms must be designed to provide access to press box on each side, grandstand manufacturer responsible for all transition points and coordination with press box installer.
 - c. The guardrailing height on the back and sides of the top viewing platforms must be 5 feet above decking surface. Colored guardrail fabric and posts supplied as described above.
- 14. Handicap provision:
 - a. Quantity of wheelchair spaces: Per IBC 2015
 - b. Wheelchair and companion seating provided in the top row of seating and accessed from top viewing platforms.
- 15. Foundations/Retaining Wall:
 - a. All foundations required for the Home Side grandstand will be installed by the General Contractor. It will be the responsibility of the grandstand manufacturer for design and engineering of all foundations, per the included soil report and plans. Note that due to adverse soil conditions, significant over-excavation, backfill and soil removal is required. Grandstand manufacturer is responsible for all design and engineering for this scope of work.

- b. The grandstand manufacturer is responsible for the design and engineering of the retaining wall located at the front column line of the grandstand. Retaining wall height to extend to underside of grandstand framing (995.0' +/-) with a depth to approximately 983.0' +/-. Grandstand must bear on that retaining wall and grandstand manufacturer is responsible for all structural designs for the wall and connection points. Supply and installation of retaining wall, drain tile system and backfilling of retaining wall is to be provided by General Contractor. Note that due to adverse soil conditions, significant overexcavation, backfill and soil removal is required for the retaining wall. Grandstand manufacturer is responsible for all design and engineering for this scope of work.
- c. All foundation and retaining wall designs with engineering calculations must be included as part of the design-review and submittal package provided by the grandstand manufacturer and stamped by an lowaregistered structural engineer.
- d. Pre-assembled, galvanized anchor bolt clusters are to be provided by the grandstand manufacturer for all grandstand foundations and connection points on the retaining wall.
- 16. Press Box Decking and Guardrailing
 - a. Grandstand manufacturer responsible for wrap-around decking (400 sq feet +/-) and guardrailing (80 lineal feet +/-) on the back of the press box, as indicated on plans. Decking and guardrailing (5 feet high) to match what is specified above. Decking to be the same as top viewing platform decking. General Contractor to provide structural supports for press box decking.
- 17. Top Platform Sun Shades
 - a. Sun shades at top viewing platform areas to be designed by architect. Grandstand manufacturer responsible for coordinating structural supports and connection points of sun shades with architect. Sun shade structure and installation are by General Contractor.
- 18. Project Coordination
 - a. Grandstand manufacturer will be required to provide seamless coordination both in design collaboration and installation timing with the Architect and General Contractor due to the buildings underneath the grandstand and press box. Willingness to provide this service will be considered as part of the evaluation process.
- 19. Drawings Submitted with Bid
 - a. Grandstand manufacturer must provide plan-view, cross-section and details to the bidding General Contractors to be included with bid if different than drawings provided in the architect's construction documents issued via addendum.

- B. Materials/Finishes
 - 1. Substructures:
 - Structural shapes meet one of the following ASTM specifications: A36, A36/A572 grade 50, A572 grade 50, A529-50, or A500 grade B.
 - b. Shop connections are seal welds.
 - c. After fabrication, all steel is hot-dipped galvanized to ASTM-A-123 specifications.
 - d. Painted finish over bare steel is unacceptable.
 - 2. Extruded Aluminum:
 - a. Seat Planks are extruded aluminum alloy, 6063-T6 with <u>clear</u> anodized 204R1, AA-M10C22A31, Class II finish.
 - b. Joint Sleeve Assembly to be inserted in flat plank to maintain true alignment in joining together two plank pieces. Extruded aluminum alloy, 6063-T, mill finish. Splice cover is unacceptable between two flat plank pieces joined in a straight line.
 - 3. Accessories:
 - a. Channel End Caps: Aluminum alloy 6063-T6, clear anodized 204R1, AA-M10C22A31, Class II. Polyethylene end cap is unacceptable.
 - b. Hardware:
 - (1) Bolts, Nuts: Hot-dipped galvanized or mechanically galvanized.
 - (2) Hold-down Clip Assembly: Aluminum alloy 6005A-T6, mill finish.
 - (3) Structural Hardware: Equal to or greater than hot-dipped galvanized ASTM-A307. No connections utilizing high strength bolts are classed as slip critical.
 - c. Aisle Nose and Stair Nose: Aluminum alloy, 6063-T6, non-skid tape or black powder coat finish.
- C. Fabrication:
 - 1. Design Load:
 - a. Live Load: 100 psf gross horizontal projection.
 - b. Lateral Sway Load: 24 plf seat plank.
 - c. Perpendicular Sway Load: 10 plf seat plank.
 - d. Live Load of Seat and Tread Planks: 120 plf.
 - e. Guardrail: Per IBC Building Code.
 - f. Windload: 90 mph.
 - 2. All manufactured connections to be shop welded.
 - a. Manufactured by certified welders conforming to AWS Standards.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. All work performed by technicians experienced in grandstand seating installation.
- B. Project as per approved shop drawings.

3.02 FIELD QUALITY CONTROL

A. All concrete footing designs, retaining wall designs and grandstand plans and details must be signed and sealed by a licensed lowa structural engineer. Soil boring test reports by CVT, Inc. provided to assist with the foundation design. Footings for the grandstands shall provide sufficient bearing area at bottom to support all loads of the grandstand as designed by the grandstand manufacturer. Hot-dipped galvanized anchor bolts shall be secured in the concrete footings. Concrete shall attain working strength of 4,000 psi.

3.03 CLEAN-UP

A. Clean up all debris caused by work of this section.

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SYNTHETIC FIELD SPORT SURFACING

PART 1 - GENERAL

1.1 SCOPE

A. Site turf contractor shall provide all labor, materials, equipment, and tools necessary for the complete installation of a synthetic turf system consisting of rubber/ sand infill including all specific markings and applicable logos desired by the owner. The installation will be within a new running track. The proposed turf shall be fastened to a perimeter wood nailer system installed by others.

1.2 GENERAL

General References Submittals Shop Drawings Quality Assurance Warranty Installation Surface Area

1.3 REFERENCES

Applicable provisions of Division 1 shall apply to this section.

1.4 SUBMITTALS

The following will be submitted prior to the award of the contract:

- A. Minimum 12"x12", with seam joint and a tufted-in white stripe, 4-inched wide.
- B Minimum 12"x12", with double seam join and inlaid white stripe, 4-inched wide.
- C. Infill Material Samples in pint size bags with re-sealable closures.

Quality Assurance Information:

Supply factory-trained installer or MANUFACTURER-approved subcontractors for the installation of the synthetic turf.

Provide sample single-source warranty document from the Synthetic Turf Manufacturer covering materials and workmanship for all components that comprise the synthetic turf system. Should the Synthetic Turf Manufacturer not be the direct installer of the fabric; the warranties from Manufacturer-approved, installation subcontractors must also be supplied to cover both materials and/or workmanship for the specified warranty period of eight years.

Third Party Insured Warranty:

Synthetic Turf Manufacturer to provide copy of Third Party Insured Warranty with submittals. In addition to standard warranty, Synthetic Turf Manufacturer to provide Third Party Insured Warranty from A - rated (AM Best Excellent Rated) Insurer. Provide Warranty Certificate, Accord Certificate, Copy of actual insurance policy, and proof of AM Best Rating for insured warranty provider. At Substantial Completion, submit to the Owner an executed copy of the warranty documents and two additional copies of Maintenance Manuals, which will include all necessary instruction for the proper care and preventative maintenance of the synthetic turf system, including, but not limited to, temporary painting and striping, minor seam repairs, disinfection and clean-up, application of antibacterial products, and top-dressing with additional infill materials.

1.5 SHOP DRAWINGS

A. Awarded manufacturer shall submit shop drawings prepared at scale and contain all pertinent information regarding installation. Drawings shall be submitted to the Owner for review and approval prior to the manufacture and shipment of the materials to the jobsite. Submit drawings for:

Composite striping plan, layouts and details for NFHS (High School) football and soccer showing any field lines, markings and boundaries, and field logos per project drawings. Detail colors and note which markings are tufted-in fabric versus inlaid fabric.

1.6 QUALITY ASSURANCE

Synthetic Turf Manufacturer and Installer's Experience:

Provide, with proposal, documentation of successful installation of 1,000,000 square feet of sand-rubber infill synthetic turf in the Midwest States in last (3) years

1.7 WARRANTY

The Synthetic Turf Contracting Party shall submit its manufacturer's, Installation Warranty and Insured 3rd Party Warranty, which guarantees the usability and playability of the synthetic turf system for its intended used for an eight-year period commencing with the date of Substantial Completion. The warranty coverage shall not be prorated or limited on the amount of the usage. There shall be no deductible.

General: The warranty submitted must have the following characteristics.

-Provide full coverage for eight years from the date of Substantial Completion (Football/ Soccer Field)

-Warrant materials and workmanship on a non-prorated basis and without limitation on the amount of usage -Coverage may not be limited on portions of the field or specific color areas

-Warrant that the materials installed meet or exceed the product specifications stated herein.

- Have a provision to either make a cash refund of to repair or replace such portions of the installed materials that are no longer serviceable in order to maintain a serviceable and playable surface at the Owner's option.

-Must be a warranty from a single source covering workmanship and all self-manufactured or procured materials.

-Must guarantee the availability or replacement materials for the synthetic turf system installed for the full warranty period.

1.8 INSURED WARRANTY

In addition to standard warranty, Provide Third Party Insured Warranty as described in Submittals above.

1.9 INSTALLATION SURFACE AREA

See Construction Drawings/ rendering for layout and dimensions. Approx. square footage 92,387. Contractor to verify all measurements.

PART 2 - MATERIALS

2.1 SYNTHETIC TURF

Turf shall be UV-stabilized. Fabric shall be a blend of monofilament/ parallel slit film and option for 100% parallel slit film grass-like fabric woven into a high strength composite backing per final owner selection.

The tufted fabric shall be filled with a mixture of SBR crumb rubber mixture and rounded, uniformly-sized silica sand. The fibers shall be tufted to a minimum pile height of 2.25 inches (Football/ Soccer Field).

The complete turf system shall be designed and manufactured for use on outdoor athletic fields. The materials, as hereinafter specified, shall be resistant to insect infestation, rot, fungus, mildew, ultraviolet light degradation and heat degradation. The completed system shall have the basic characteristic of free vertical drainage of surface run-off through the infill turf system to the permeable sub-base and ultimately into the perimeter storm system.

Pile yarn (polyethylene) shall be proven athletic caliber yarn designed specifically for outdoor use and stabilized to resist the effect of ultraviolet degradation, heat, foot traffic, water, and airborne pollutants.

The primary pile fiber, Polyethylene, shall contain the following physical characteristics:

Fiber Type:	UV-stabilized extruded polyethylene monofilament, Parallel Slit Film
Denier:	10,000 denier=>monofilament
	8,000 denier => slit film

Yarn Thickness/Width minimum 110 microns Parallel slit film, 330 microns Monofilament

Pile Fiber Weight min 42 ounces per square yard or >

Finished Pile Ht. MINIMUM 2.25"

Fabric Width 15 feet

Tuft Bind Strength >10 lbs

Primary Backings >8 oz. per square yard

Secondary Elastomeric Coating min 18 oz per square yard

Grab Tear Strength (length) min 200 lbs

Pill Burn Test Pass (with filling)

Field Fabric Colors (standard) Green

End zone Color:Black, To be approved by owner. See attached rendering Letter end zones Color: Gold w/white shadow outline. Shall read "RAMS" See attached rendering. Football Coaches/ Players Box Color: Black. See attached rendering Center Logo: Rams Emblem per color scheme, To be approved by owner. See attached rendering

Inlaid Fabric Colors (standard) Specific colors to be selected by Owner.

In-fill material shall be a suitable mixture of a SBR rubber granules and rounded, uniformly-sized silica sand. Allowable percentages shall be:

Total Infill weight= Approx 6lbs/ S.F or as subsequently approved

SBR rubber granules: Minimum 70% by weight or as subsequently approved

Silica Sand: Minimum 30% by weight or as subsequently approved 18005 Glenwood Bid Pkg 2 32 18 23.39 - 3

Substitutions/ alternates may be presented for consideration/evaluation

Seams shall be custom cut on site using suitable equipment and manufacturer's standard sewn installation techniques. Hash marks and other in-lays shall be glued

2.2 SHOCK ABSORBENCY

A. Test Locations

The installed system will be tested for Gmax in accordance with ASTM F-1936. All test locations will be offset approximately 12-inches from any fabric seam, and all subsequent re-testing will be performed at the exact same locations as previous test locations for comparisons. Document test locations in test report. Testing shall be performed at Contractor's expense utilizing services of a certified tester.

Test Frequency and Gmax Compliance Standards – The Synthetic manufacturer shall arrange and pay for an independent test lab to test the synthetic turf upon completion of synthetic turf placement. A second test in year 5 will be paid for by the Owner using an independent testing agency. The owner, testing agency and turf provider will evaluate and make recommendations at that time. Turf Contractor shall provide additional material at the time of substantial completion for storage by owner into compliance if Gmax testing indicates that field falls below acceptable Gmax level as defined below.

Gmax test value standards shall not exceed the following: At Substantial Completion not to exceed 165 G's average with no single location value in excess of 165 as the average of the 2nd and 3rd drop.

After the 5th year and with no more than one top dressing at Owner's expense a second Gmax test shall be performed by independent testing agency at Owner's expense. At that time Gmax will be evaluated with the Owner and turf provider. In no event shall the Gmax Average for the field exceed 165 at any location during the warranty period.

2.3 MAINTENANCE REPAIR MATERIALS/ EQUIPMENT

Upon Substantial Completion supply directly to Owner the following items in the quantity specified to repair 1500 sq. ft.:

Seaming Tape

Seaming Epoxy

Turf Fabric (Green)

Infill Rubber/Sand

Supply maintenance information and contact source

Supply required maintenance grooming equipment

- I. Field Maintenance Equipment
 - 1. Turf manufacturer shall also supply groomer and sweeper equipment to owner for proper maintenance of field.
 - A) Groomer: Sports Turf Groomer (920SDE) as manufactured by Greens Groomer Worldwide- Quantity (1)
 - B) Sweeper: Turf Sweeper (LitterKat) as manufactured by Greens Groomer Worldwide- Quantity (1)
 Provide detailed outline of methods to be used in property maintenance of field to the owner.

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PART 3 – EXECUTION

3.1 GENERAL

The installation shall be performed in full compliance with approved shop drawings.

Only technicians, factor-trained in the installation of athletic caliber synthetic turf system working under the direct supervision of the Synthetic Turf Manufacturer's construction supervisors shall undertake the placement of the system.

The surface to receive the synthetic turf shall be inspected and certified by the manufacturer as ready for the installation of the synthetic turf system and must be clean as installation commences and shall be maintained in that condition throughout the process.

3.2 SURFACE PLANARITY

Turf Installer will have access to finished stone subgrade for planarity checks. CONTRACTOR shall provide notice of completion of grading and stone subgrade to LA/E and shall maintain finished stone subgrade ready for planarity checks for up to 5 business days following notification.

Turf installer shall commence planarity checks of stone subgrade within 5 business days of notification by CONTRACTOR.

3.3 SYNTHETIC TURF

Synthetic turf shall be loose laid across the field, stretched, and attached to the perimeter edge nailer per the detail and manufacturer's standard attachment procedures. All seams shall be sewn/ glued. Turf shall be of sufficient length to permit full cross-field installation. All turf panel seams shall be transverse across the field and run parallel along sidelines. Seams shall be sewn/ glued, flat, tight, and permanent with no separation or fraying.

Infill materials shall be properly mixed on site and applied in numerous lifts using special broadcasting equipment in accordance with manufactures recommendations. The turf shall be raked and brushed properly as the mixture is applied. The mixture can only be applied when dry.

3.4 FIELD MARKINGS AND DECORATIONS

The football field game markings shall be white and shall take priority over game markings for any other sport. Four-inch (4") wide strips of tufted-in white fabric shall be used to delineate the 5-yard stripes, goal lines. End lines, and sidelines for the football field shall be Twelve-inch wide (12"). Solid Color Restricted Player zones. All other football/soccer game markings shall be as per attached plans and as approved by owner

3.5 CLEAN UP

Contractor shall provide the labor, supplied, and equipment as necessary for final cleaning of surfaces and installed items.

All usable remnants of new material shall become the property of the Owner.

The contractor shall keep the area clean throughout the project and clear of debris.

END OF SECTION 32 18 23.29

