

# ADDENDUM 03



**PROJECT:** Mt. Zion High School Athletic Fields  
Improvements  
County Public Schools

**ADDENDUM NO.:** 03

**PROJECT NUMBER:** 022-01063-00

**DATE OF ISSUE:** 12.27.2023

This addendum modifies the Contract Documents only in the manner and to the extent stated herein and shown on any accompanying drawings and will become a part of the Contract Documents. Except as specified or otherwise indicated by this addendum, all work shall be in accordance with the basic requirements of the Contract Documents.

**PROPOSER SHALL ACKNOWLEDGE RECEIPT OF ADDENDUM IN THE SPACE PROVIDED ON THE BID PROPOSAL FORM; FAILURE TO DO SO MAY CONSTITUTE AN INFORMALITY IN THE PROPOSAL.**

The following clarifications, amendments, additions, revisions, changes and/or modifications shall take precedence over the drawings and specifications for the above-named project only in the amount and to the extent hereinafter specified in this addendum. Where any item called for in the specifications or indicated on the drawings is not supplemented hereby, the original requirements shall remain in effect. Where any original item is amended, voided or superseded hereby, the provision of such item not specifically amended, voided or superseded shall remain in effect.

ITEM NO. 1: Reference the **PROJECT MANUAL**

A. The following Specifications have been revised and are hereby reissued and made part of the Proposal Documents. A copy of each is attached herewith to this Addendum:

1. 004113 – BID FORM
2. 011100 – SUMMARY
3. 012100 – ALLOWANCES
4. 321813 – ARTIFICIAL GRASS FIELD TURF
5. 329100 – SYNTHETIC TRACK SURFACING SYSTEM

B. The following Specifications are hereby removed from the Proposal Documents:

6. 104100 – EXTERIOR MESSAGE SIGN

**END OF ADDENDUM NO. 03**

004113 – BID FORM

Clayton County Board of Education  
1058 Fifth Avenue  
Jonesboro, Georgia 30236

Re: Project No.  
**Mount Zion High School Athletic Fields Improvements** (the "Project")

Ladies and Gentlemen:

In compliance with your Advertisement for Bids and the Bidding Documents, the undersigned Bidder,

\_\_\_\_\_  
*[legal name of Bidder]*

\_\_\_\_\_  
\_\_\_\_\_  
*[address of Bidder]*

\_\_\_\_\_  
*[telephone number of Bidder]*

having carefully examined the site and Bidding Documents, including the proposed contract documents and any Addenda thereto, for the Project, proposes and agrees, if this bid is accepted, to enter into a contract with the Owner in the exact form provided in the Bidding Documents and to perform the Work including all services, supervision, labor, equipment and material in conformance with the contract documents, in the time stated therein, for the lump sum of:

\_\_\_\_\_ dollars  
*[written in words]*  
(\$ \_\_\_\_\_), which sum shall constitute the Base Bid.

The undersigned Bidder further agrees that if any or all of the following Alternates as described in the proposed contract documents are accepted, the following amounts shall be added to or subtracted from the Base Bid:

(1) Add Alternate No. 1 – N/A:

\_\_\_\_\_ dollars (\$ \_\_\_\_\_).  
*[written in words]*

(2) Add Alternate No. 2 – N/A:

\_\_\_\_\_ dollars (\$ \_\_\_\_\_).  
*[written in words]*

(3) Deductive Alternate No. 3 – N/A:

\_\_\_\_\_ dollars (\$ \_\_\_\_\_).  
*[written in words]*

The following unit prices are provided in accordance with Specification Section 01 2200 -Unit Prices. The undersigned agrees that the following unit prices shall be used in determining the quantity allowances indicated in Specification Section 00 2100 - Allowances and are included in the Base Bid. The undersigned further agrees that these unit prices shall be used in determining changes to the Contract Price due to changes in quantities of this work, if any, authorized by Change Order, subject to any equitable adjustment to the unit prices in the event of a material change in quantity as set forth in the Contract Documents.

**(Quantities shown shall be included in the Base Bid as an Allowance)**

<b>Quantity Allowance:</b>		<b>Unit Prices</b>		<b>Allowance Quantity</b>	<b>Allowance Amount</b>
<b>Unsatisfactory fill material on site or other unsuitable buried materials:</b>					
1	Remove & dispose of unsatisfactory material offsite, replace with structure fill material from onsite source	\$	x	125 CY	=\$
2	Remove unsatisfactory material and blend with structure fill material from onsite source as directed by Geotechnical engineer	\$	x	75 CY	=\$
3	Remove & dispose of unsatisfactory material offsite	\$	x	50 CY	=\$
4	Remove & dispose of unsatisfactory material offsite, replace with #57 stone	\$	x	25 CY	=\$
5	Remove & dispose of unsatisfactory material offsite, replace with surge stone	\$	x	25 CY	=\$
6	Remove & dispose of unsatisfactory material offsite, replace with Graded Aggregate Base (GAB)	\$	x	250 tons	=\$
7	Install Terratex HD Fabric	\$	X	100 SY	=\$
<b>Mass Rock Excavation</b>					
8	Remove & dispose of mass rock offsite	\$	x	25 CY	=\$
9	Remove & place mass rock onsite where approved by Owner	\$	x	25 CY	=\$
<b>Trench Rock Excavation</b>					
10	Remove & dispose of trench rock offsite	\$	x	25 CY	=\$
11	Remove & place trench rock onsite where approved by Owner	\$	x	25 CY	=\$
<b>Lump Sum Allowances</b>					
1	Owner's Contingency (\$150,000):				\$ 300,000.00
2	Branding / Graphics				\$ 20,000.00
<b>TOTAL ALLOWANCES</b>					<b>\$ 320,000.00</b>

In submitting this Bid, Bidder represents that it has examined the site and locality where the work

is to be performed, the legal requirements (Federal, State, and local laws, ordinances, rules and regulations) and the conditions affecting cost, progress, or performance of the work and has made such independent investigations as Bidder deems necessary. The Bid is based on beginning work on site "as-is".

The undersigned Bidder agrees that if it is notified in writing by mail, telegraph, facsimile or hand-delivery of the acceptance of this proposal, via Notice of Award or otherwise, within sixty (60) days after the date of the Bid opening, the undersigned Bidder will execute, within five (5) days of the date of the notice, a contract for the Work in accordance with the Bidding Documents in the exact form provided therein for the amount stated above, and at that time will furnish and deliver to the Owner a satisfactory Performance Bond and a satisfactory Payment Bond, both on the exact forms provided in the Bidding Documents and each in an amount equal to one hundred percent (100%) of the Contract Price. The Bidder further agrees to furnish other documents or information as required by the Bidding Documents in accordance therewith.

Enclosed herewith is a fully executed Bid Bond in the exact form required by the Bidding Documents in the amount of not less than five percent (5%) of the Base Bid. The undersigned agrees that the above stated amount is the proper measure of liquidated damages that the Owner will sustain by the failure of the undersigned to execute the Contract and to furnish the Performance Bond and Payment Bond in case this Bid is accepted.

The undersigned Bidder agrees to commence actual physical work on the site with adequate forces and equipment not later than fourteen (14) calendar days of the effective date of the Notice to Proceed to be issued by the Owner, and to complete all of the Work within the time provided in the proposed contract documents.

The undersigned Bidder hereby acknowledges receipt of the following Addenda *[insert the number and date of each Addendum; if none, insert "None"]*:

\_\_\_\_\_

\_\_\_\_\_

The undersigned Bidder is duly organized and existing under the laws of the State of \_\_\_\_\_ as a:

- (1) \_\_\_ Sole Proprietorship;
- (2) \_\_\_ Partnership;
- (3) \_\_\_ Corporation;
- (4) \_\_\_ Limited Liability Company; or
- (5) \_\_\_ Other legal entity (specify)\_\_\_\_\_.

The Bidder's FEI number, or Social Security number if the Bidder is an individual, is as follows:

\_\_\_\_\_.

In accordance with the Bidding Documents, the following are attached hereto or enclosed herewith:

- (1) Original and one (1) duplicate of this Bid, appropriately marked;
- (2) Bid Bond;
- (3) Subcontractor Listing;
- (4) Corporate Certificate, Partnership Certificate or Entity Certificate (as applicable); and
- (5) Bidder's and Individuals' Affidavit of Noncollusion.

The Bidder understands that the Owner reserves the right to reject any or all Bids, and to waive informalities and technicalities in the bidding.

The Bidder understands that all anticipated federal, state and local permits required for the Project have not been obtained. If any permits have not been obtained, the Bidder understands that the Owner's anticipated date for obtaining all of the required permits is on or before 7 January 2013.

The Bidder understands that all rights of way and easements anticipated for the Project have not been obtained. If any rights of way or easements have not been obtained, the Bidder understands that the Owner's anticipated date for obtaining all of the required rights of way or easements is on or before 7 January 2013.

The Bidder agrees that this Bid may not be revoked or withdrawn for a period of sixty (60) days after the date and time of Bid opening, but shall remain open for acceptance for a period of sixty (60) days following Bid opening, excepting only as otherwise expressly provided by applicable law.

By submission of this Bid, the Bidder certifies that this Bid has been derived independently, without consultation, communication or agreement as to any matter relating to this Bid with any other Bidder or with any competitor of Bidder. The Bidder hereby certifies that this Bid is made without prior understanding, agreement or connection with any corporation, firm, entity or person submitting a bid for the same Work and is in all respects fair and without collusion or fraud. The Bidder understands that collusive bidding is a violation of state and federal law and can result in fines, prison sentences, and civil damage awards. The Bidder agrees to abide by all conditions of the Bid and all applicable laws.

By signing this Bid on behalf of Bidder, the individual signatory below represents and warrants that he or she, acting alone, has full power and authority to sign on behalf of Bidder and to fully bind Bidder to the terms and conditions of this Bid and the proposed contract documents.

The full names, titles and addresses of persons and firms interested in the foregoing Bid as principals are as follows:

NAME	TITLE	ADDRESS
_____	_____	_____
_____	_____	_____
_____	_____	_____

Respectfully submitted,

\_\_\_\_\_  
*[typed name of Bidder]*

By: \_\_\_\_\_ [seal]  
*[signature]*

\_\_\_\_\_  
*[typed name and title]*

\_\_\_\_\_  
*[address of Bidder]*

(\_\_\_\_\_) \_\_\_\_\_  
*[business telephone number]*

\_\_\_\_\_  
*[date of execution]*

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

Came before me, \_\_\_\_\_, and after being  
*[typed name of individual signing Bid]*  
duly sworn, deposes and says that he/she is \_\_\_\_\_ of  
*[title]*  
\_\_\_\_\_ and that all of the foregoing is true and correct to the  
*[Bidder]*  
best of his/her information and belief.

\_\_\_\_\_  
*[signature of individual signing Bid]*

Subscribed and sworn to  
before me this \_\_\_\_ day of  
\_\_\_\_\_, 201\_\_.

(seal)

\_\_\_\_\_  
Notary Public

My Commission Expires:  
\_\_\_\_/\_\_\_\_/\_\_\_\_

END OF SECTION 004113

## SECTION 01 1100 - SUMMARY

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes the following:
1. Work covered by the Contract Documents.
  2. Type of the Contract.
  3. Work phases.
  4. Work under other contracts.
  5. Proof of purchase for long-lead items.
  6. Owner-furnished products.
  7. Use of premises.
  8. Owner's occupancy requirements.
  9. Work restrictions.
  10. Specification formats and conventions.
  11. Miscellaneous provisions.
- B. Related Sections include the following:
1. Division 1 Section "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

#### 1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Identification: Mount Zion High School Athletic Fields Improvements
- B. Project Location:
- Mount Zion High School  
2536 Mt. Zion Parkway  
Jonesboro, GA 30236  
Facility #631-0290
- C. Owner: Clayton County Board of Education.
1. Owner's Representative:  
~~Elliott Bryson~~ Christy Crawford  
218 Stockbridge Road  
Jonesboro, GA 30236  
~~[elliott.brysoniii@clayton.k12.ga.us](mailto:elliott.brysoniii@clayton.k12.ga.us)~~ [christy.crawford@clayton.k12.ga.us](mailto:christy.crawford@clayton.k12.ga.us)
- D. Architect:  
Melissa Chanin  
SSOE I Stevens & Wilkinson  
100 Peachtree Street, NW  
Suite 2500  
Atlanta, GA 30303  
[mchanin@ssoe.com](mailto:mchanin@ssoe.com)
- E. The Work includes the following:
1. Mt Zion High School:
    - a. demolition of all existing dugouts and field house at the existing softball field
    - b. sod, irrigation, new field lighting, new track and bleachers at the existing

- football field
- c. synthetic turf, new perimeter fencing, new dugouts, new score board and bleachers at the existing baseball field
- d. new ADA compliant sidewalks
- e. new press boxes at the football and baseball fields
- f. New concessions / restroom building

### 1.3 TYPE OF CONTRACT

- A. Project will be constructed under a single prime contract, except as may be otherwise noted with respect to separate contractors, if any.

### 1.4 WORK PHASES

- A. Generally, the work will be phased based on specific sport seasons —football, baseball, softball.
- B. Contractor agrees that any time limits specified in the Contract Documents for completion of the Work are reasonable and allow sufficient time for performance of such Work.
- C. The Contractor shall notify the Owner immediately in any case where the availability or delivery of materials or supplies, or any other fact or event, may jeopardize completion of the Work.

### 1.5 WORK UNDER OTHER CONTRACTS

- A. General: Cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying Work under this Contract. Coordinate the Work of this Contract with work performed under separate contracts.

### 1.6 PROOF OF PURCHASE FOR LONG-LEAD ITEMS

- A. Contractor shall submit to Owner proof of purchase of all mechanical units and any other long lead time items. This proof of purchase invoice shall be issued by the FACTORY and shall confirm that the order has been received from manufacturer's representative and shall be accompanied by copies of the mechanical units specifications, including make, size, voltage, model numbers, etc. and shall include anticipated shipping or delivery date. Contractor shall obtain and submit factory proof of purchase immediately after the factory receives the purchase order from the manufacturer's representative so as not to delay the Work. Documents that are not issued by the factory are not acceptable as proof of purchase issued by the factory.

### 1.7 OWNER-FURNISHED PRODUCTS

- A. Owner will furnish products indicated in subsection B below. The Work includes providing support systems to receive Owner-furnished products and making plumbing, mechanical, and electrical connections to Owner-furnished products. The following provisions apply to Owner-furnished products:
  - 1. Owner will arrange for and deliver any necessary Shop Drawings and Product Data to Contractor.
  - 2. Owner will arrange and pay for delivery of Owner-furnished items according to Contractor's Construction Schedule, subject to subsection A.6 below.
  - 3. After delivery, Owner will inspect delivered items for damage. Contractor shall be



- present for and assist in Owner's inspection.
4. If Owner-furnished items are damaged, defective, or missing, Owner will arrange for replacement.
  5. Owner will arrange for manufacturer's field services and for delivery of manufacturer's warranties.
  6. Owner will furnish Contractor the earliest possible delivery date for Owner-furnished products. Using Owner-furnished earliest possible delivery dates, Contractor shall designate delivery dates of Owner-furnished items in Contractor's Construction Schedule.
  7. Contractor shall review Shop Drawings, Product Data, and Samples and return them to Architect noting discrepancies or anticipated problems in use of product.
  8. Owner is responsible for receiving, unloading, and handling Owner-furnished items at Project site. Contractor is responsible for making plumbing, mechanical, and electrical connections, including any handling incidental thereto.
  9. Contractor is responsible for protecting Owner-furnished items from damage during storage and handling, including damage from exposure to the elements.
  10. If Owner-furnished items are damaged as a result of Contractor's operations, Contractor shall repair or replace them.
  11. Contractor shall install and otherwise incorporate Owner-furnished items into the Work.
  12. Contractor shall pay any applicable sales or use taxes due, if any, in connection with Owner-furnished products.

- B. Owner-Furnished Products:  
1. None noted.

#### 1.8 USE OF PREMISES

- A. General: Contractor shall have full use of the Project site for construction operations during construction period, except as limited by Owner's right to perform work or to retain other contractors on portions of Project, and as limited as indicated on Drawings by the Contract limits, including limits of any indicated work phase(s), and subject to any other restrictions in the Contract Documents.
- B. Use of Site: Limit use of premises to work in areas within the limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
1. Limits: Confine constructions operations to limits indicated on Drawings. If phase limits are indicated, limit operations to each phase limit indicated.
  2. Owner Occupancy: Allow for Owner occupancy of Project site and use by the public.
  3. Driveways and Entrances: Keep driveways, parking areas, loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
    - a. Schedule deliveries to minimize use of driveways and entrances.
    - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

#### 1.9 OWNER'S OCCUPANCY REQUIREMENTS

- A. Partial Owner Occupancy: Owner will occupy portion of the site during entire construction period, with the exception of areas under construction. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits, unless otherwise indicated.

1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction. Provide and maintain safe emergency access routes for all occupants out of the existing building.
  2. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.
- B. Owner Occupancy of Completed Areas of Construction: Owner reserves the right to occupy and to place and install equipment in completed areas of building, before Substantial Completion, provided such occupancy does not interfere with completion of the Work. Such placement of equipment and partial occupancy shall not constitute Substantial Completion of the Project or acceptance of the Work. If Owner exercises such right:
1. Architect shall prepare a certificate of partial substantial completion for each specific portion of the Work to be occupied before Substantial Completion of the Project.
  2. Contractor shall obtain a Certificate of Occupancy, or partial Certificate of Occupancy as applicable, from authorities having jurisdiction before partial Owner occupancy.
  3. Before partial Owner occupancy, Contractor shall make mechanical and electrical systems fully operational, and successfully complete required tests and inspections. On occupancy, Owner will operate and maintain mechanical and electrical systems serving occupied portions of building.
  4. On occupancy, Owner will assume responsibility for routine maintenance and custodial service for occupied portions of building.

#### 1.10 WORK RESTRICTIONS

- A. On-Site Work Hours: Work shall be generally performed inside the existing building during normal business working hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, except as otherwise indicated.
1. Weekend Hours: At Contractor's discretion, subject to the Contract Documents and applicable laws.
  2. Early Morning Hours: Limit deliveries and construction traffic as much as possible during the time between 7:30 a.m. and 8:30 a.m. to avoid bus traffic conflicts.
  3. Hours for Utility Shutdowns: Weekends and holidays or as approved otherwise by the Owner.
  4. Hours for Core Drilling or other excessively noisy activities shall be performed after 4:00 p.m. during weekdays.
  5. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
  6. Notify Architect and Owner not less than (5) five days in advance of proposed utility interruptions.
  7. Do not proceed with utility interruptions without Architect's or Owner's written permission.

#### 1.11 SPECIFICATION CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions include the following:
1. Abbreviated Language: Some language used in the Specifications and other

Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular, where applicable as the context of the Contract Documents indicates.

2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
  - a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

#### 1.12 MISCELLANEOUS PROVISIONS

- A. Any reference in the Specifications to General Conditions of the Contract shall be deemed to mean the Contract.
- B. Security: At a minimum:
  1. Limit access to the site to persons involved with the Work, unless otherwise directed by Owner.
  2. Secure materials, equipment and Work as required to prevent loss.
- C. Obscene or otherwise inappropriate gestures, comments, graffiti, notations, etc., will not be tolerated. Any persons which are found or identified in relation to such acts shall be removed from the Project immediately.
- D. Keying Requirements: Contractor shall tag and mount all keys for the entire Project in a key cabinet for presentation to the Owner. These keys may include, but are not limited to, cooler/freezer keys, toilet accessory keys, kitchen equipment keys, fire alarm and electrical panel keys, telescoping bleacher keys, etc. Contractor shall coordinate delivery of keys for inclusion into the key control system and key cabinet.
- E. Inspection and Testing for Asbestos Content of Building Materials: Building materials which are scheduled to be incorporated into the work under the Contract shall first either be certified by the Manufacturer to be asbestos free or be inspected and tested by accredited laboratories and certified to be free of asbestos content in accordance with EPA, and AHERA rules.
  1. In lieu of the requirements stated in paragraph E above the Contractor and all Subcontractors shall submit the attached Asbestos Exclusion Certification Form. Receipt of all affidavits shall be a condition of Final Payment.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 1100

Revised per Addendum #03, December 27, 2023

## SECTION 01 2100 - ALLOWANCES

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This Section includes administrative and procedural requirements governing allowances.
  - 1. Certain items are specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Change Order.
- B. Types of allowances include the following:
  - 1. Lump-sum allowances.
  - 2. Quantity allowances.
- C. Related Sections include the following:
  - 1. Division 1 Section "Contract Modification Procedures" for procedures for submitting and handling Change Orders for allowances.
  - 2. Division 1 Section "Unit Prices" for procedures for using unit prices.
  - 3. Other Sections for items of Work covered by allowances.

#### 1.2 DEFINITIONS

- A. Suitable soil/materials are soils or materials defined as satisfactory or approved backfill and fill materials or granular fill acceptable to the civil engineer of record for the Project.
- B. Unsuitable soil/materials are soils or materials defined as unsatisfactory and/or that are not suitable or appropriate for their intended use as determined by the geotechnical testing agency for the Project or the civil engineer of record for the Project.

#### 1.3 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.
- B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Architect from the designated supplier.

#### 1.4 SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.
- B. Submit invoices or delivery slips to show actual quantities of materials delivered to or removed from the site for use in fulfillment of each allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.5 COORDINATION

- A. Coordinate allowance items with other portions of the Work.

1.6 ALLOWANCES, GENERAL

- A. Owner reserves the right to use unused portions of Allowances for other Work required by the Project.
  - 1. The Owner or Architect shall direct the Contractor as to the use of any unused Allowances.

1.7 LUMP-SUM ALLOWANCES

- A. Line items for each lump sum allowance scheduled shall be included on the "Schedule of Values" included with the Application for Payment.
- B. Lump sum allowances shall include cost to Contractor of specific products and materials provided by Contractor under lump sum allowance and shall include any applicable taxes, freight, and delivery to Project site.
- C. Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and all other costs and compensation (excepting only those costs set forth in the immediately preceding subparagraph) related to products and materials provided by Contractor under lump sum allowance shall be included as part of the Contract Price but not part of the lump sum allowance.
- D. At project closeout, credit all unused allowances remaining in the Schedule of Values to Owner by Change Order.

1.8 QUANTITY ALLOWANCES

- A. Use quantity allowances as scheduled in this section in conjunction with unit prices as scheduled in Specification Section Unit Prices to determine line item values associated with the quantity allowances schedule.
- B. Line items for each quantity allowance scheduled shall be included on the "Schedule of Values" included with application for payments.
- C. Quantity allowance values shall include all costs, overhead and profit associated with such quantity allowance item, including without limitation all labor, material, delivery, installation, insurance, taxes, and all other costs and compensation for such quantity allowance item.
- D. The same unit price as scheduled in Specification Section - Unit Prices shall be used in determining changes to the Contract Price due to changes in quantities of unit price work, if any, authorized by Change Order, subject to any equitable adjustment to the unit prices in the event of a material change in quantity as set forth in the Contract.
- E. At project closeout, credit all unused allowances remaining in the Schedule of Values to Owner by change order.

PART 2 - PRODUCTS (not used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects.

Return damaged or defective products to manufacturer for replacement.

- B. If unsuitable soils or rock are encountered during the Project, notify the geotechnical testing agency for the Project and the civil engineer of record for the Project immediately.

### 3.2 PREPARATION

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

### 3.3 UNSUITABLE SOILS AND ROCK

- A. Removal, disposal and placement of unsuitable soils materials and any rock shall be at the recommendation of the geotechnical testing agency for the Project and as approved by the civil engineer of record for the Project.
  1. Remove shall include removal by acceptable methods and equipment of the minimum quantities deemed necessary by the geotechnical testing agency for the Project and the civil engineer of record for the Project.
  2. Disposal shall include disposal of materials either on site or off site as indicated. Disposal of materials on site shall be at the direction of the civil engineer of record for the Project. Rock materials disposed of on site shall be placed in fill slopes as directed by the civil engineer of record for the Project. Disposal of materials off site shall be in accordance with applicable laws and regulations. It shall be the Contractor's responsibility to dispose of off site materials accordingly.
  3. Place shall include obtaining suitable backfill and or fill materials or stone obtained from on-site or off-site sources as indicated and placing materials and compacting to Project requirements. Materials obtained from on-site sources shall be obtained from on site locations as directed by the civil engineer of record for the Project.
  4. No allowances shall be paid unless all quantities are qualified, quantified and approved by the geotechnical testing agency for the Project and the civil engineer of record for the Project.

### 3.4 SCHEDULE OF ALLOWANCES

- A. Lump Sum Allowances
  1. Owner Contingency Allowance: The Contractor shall include an allowance of **\$300,000.00** to be used as directed by the Owner **plus an allowance of \$20,000 for branding / graphics**. Contractor's overhead and profit on costs applied to this allowance shall be carried in the base bid and shall not be applicable against this allowance.
- B. Quantity Allowances
  1. Include in the Base Bid an amount to remove & dispose of unsatisfactory material offsite, replace with structure fill material from onsite source — 125 CY.
  2. Include in the Base Bid an amount to remove unsatisfactory material and blend with structure fill material from onsite source as directed by Geotechnical engineer — 75 CY
  3. Include in the Base Bid an amount to remove & dispose of unsatisfactory material offsite — 50 CY
  4. Include in the Base Bid an amount to remove & dispose of unsatisfactory material offsite, replace with #57 stone - 25 CY
  5. Include in the Base Bid an amount to remove & dispose of unsatisfactory material offsite, replace with surge stone- 25 CY
  6. Include in the Base Bid an amount to Remove & dispose of unsatisfactory

material offsite, replace with Graded Aggregate Base (GAB) — 250 tons

7. Include in the Base Bid an amount to furnish and install Terratex HD Fabric — 100 SY
8. Include in the Base Bid an amount to remove & dispose of mass rock offsite — 25 CY
9. Include in the Base Bid an amount to remove & place mass rock onsite where approved by Owner — 25 CY
10. Include in the Base Bid an amount to remove & dispose of trench rock offsite — 25 CY
11. Include in the Base Bid an amount to remove & place trench rock onsite where approved by Owner — 25 CY

END OF SECTION 012100

## SECTION 321813 - ARTIFICIAL GRASS FIELD TURF

### PART 1 – GENERAL

#### 1.1 WORK INCLUDED

- A. Furnish all labor, materials, tools and equipment necessary to install all artificial grass field turf as indicated on the plans and as specified herein. The installation of all new materials shall be performed in strict accordance with the manufacturer's installation instructions and in accordance with all approved shop drawings.
- B. Perimeter edge details required for the system shall be as detailed and recommended by the Manufacturer, and as approved by the Owner. Supply and installation of these details will be under the scope of work of the artificial grass field turf Installer/Manufacturer.

#### 1.2 REFERENCES

- A. FM P7825 - Approval Guide; Factory Mutual Research Corporation; current edition
- B. ASTM Standard Test Methods:
  - 1. D1577 - Standard Test Method for Linear Density of Textile Fiber
  - 2. D5848 - Standard Test Method for Mass Per Unit Area of Pile Yarn Floor Covering
  - 3. D418 - Standard Test Method for Testing Pile Yarn Floor Covering Construction
  - 4. D1338 - Standard Test Method for Tuft Bind of Pile Yarn Floor Coverings
  - 5. D1682 - Standard Method of Test for Breaking Load and Elongation of Textile Fabrics
  - 6. D5034 - Standard Test Method of Breaking Strength and Elongation of Textile Fabrics (Grab Test)
  - 7. F1015 - Standard Test Method for Relative Abrasiveness of Synthetic Turf Playing Surfaces
  - 8. D4491 - Standard Test Methods for Water Permeability of Geotextiles by Permittivity
  - 9. D2859 - Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials
  - 10. F355 - Standard Test Method for Shock-Absorbing Properties of Playing Surfaces.
  - 11. F1936 - Standard Test Method for Shock-Absorbing Properties of North American Football Field Playing Systems as Measured in the Field
  - 12. D1557 - Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort.
- C. 2001 NCAA Football Rules and Interpretations / National High School Federation Rules and Standards

#### 1.3 SUBMITTALS

- A. Prior to the Architect approval of a specified artificial turf system, the Manufacturer shall specify in writing that their turf system does not violate any other manufacturer's patents, patents allowed or patents pending.



B. Submit the following with the Bid/Proposal:

1. Submit two samples, 6x6 inch in size, illustrating details of finished product.
2. A letter and specification sheet certifying that the products of this section meet or exceed specified requirements.
3. Certified copies of independent (third-party) laboratory reports on ASTM tests as follows:
  - a. Pile Height, Face Width & Total Fabric Weight, ASTM D418 or D5848
  - b. Primary & Secondary Backing Weights, ASTM D418 or D5848
  - c. Tuft Bind, ASTM D1335
  - d. Grab Tear Strength, ASTM D1682 or D5034
  - e. Pill Burn Test ASTM D2859
4. List of existing installations, including Owner representative and telephone number.
5. Lists providing specific contacts and telephone numbers of the following existing installations:
  - a. A softball or baseball field of the exact specified material, including the infill material and fiber, in play for at least 5 years. These installations must have used the same manufacturer, product and company they are proposing for this field.
  - b. A list of NCAA division 1 baseball or softball fields in play for at least four seasons.
  - c. A list of high school football, baseball, softball, and soccer fields in play for at least four seasons
  - d. A list of at least of 10 fields of 65,000 sq. ft or more in the United States in the past two years with the same manufacturer, product and company, including the exact same infill system, fiber and fiber manufacturer being proposed for this field.
  - e. A sand/rubber infill field in play for at least 5 years in the United States. This installation must have used the same manufacturer, product and company being proposed for this field.
6. Resumé of Installation Supervisor who will be present on site during installation.
7. The Turf Contractor and the turf Manufacturer (if different from the company) shall provide a current audited company financial statement
8. The Turf Contractor and turf Manufacturer (if different from the company) shall provide evidence that their turf system does not violate any other manufacturer's patents, patents allowed or patents pending.
9. The Turf Contractor and the turf Manufacturer (if different from the company) shall provide a sample copy of insured, non-prorated warranty and insurance policy information.

C. Prior to ordering of materials:

1. The Contractor shall submit Shop Drawings indicating:
  - a. Field Layout to include school/district logo
  - b. Field Marking Plan and details for the specified sports;( i.e., NHF Football).
  - c. Roll/Seaming Layout
  - d. Methods of attachment, field openings and perimeter conditions.
2. The turf Manufacturer must submit the fiber manufacturer's name, type of fiber and composition of

fiber.

- D. Prior to Final Acceptance, the Contractor shall submit to the Owner:
1. Three (3) copies of Maintenance Manuals, which will include all necessary instructions for the proper care and preventative maintenance of the synthetic turf system, including painting and markings.
  2. Project Record Documents: Record actual locations of seams, drains or other pertinent information. Submit electronic documentation in latest AutoCad format.
  3. Warranty: Submit Manufacturer Warranty and ensure that forms have been completed in Owner's name and registered with Manufacturer.

#### 1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section. The Turf Contractor and/or the turf Manufacturer:
1. Must be experienced in the manufacture and installation of this specific type of synthetic infill grass system for at least 5 years with the same manufacturer, product and company they are proposing for this field. This  
includes the tuft fiber, the backing, the backing coating, and the installation method
  2. Must have a NCAA division 1/high school softball or baseball field in play for at least four seasons.
  4. Must have a softball or baseball field of the exact specified material, including the infill material and fiber, in play for at least 5 years with the same manufacturer and company they are proposing for this field.
  5. Must have a sand/rubber infill field in play for at least 5 years in the United States.
  6. Must have installed a minimum of 10 fields of 65,000 sq. ft or more in the United States in the past two years with the same manufacturer, product and company, including the exact same infill system, fiber and fiber manufacturer that is being proposed for this field
- B. Installer Qualifications: Company specializing in performing the work of this section.
1. The Turf Contractor must provide competent workmen skilled in this specific type of synthetic grass installation.
  2. The designated Supervisory Personnel on the project must be certified, in writing by the turf Manufacturer, as competent in the installation of this material, including sewing seams and proper installation of the infill mixture.
  3. The Manufacturer shall have a representative on site to certify the installation and Warranty compliance.
- C. Prior to the beginning of installation, the Installer of the synthetic turf shall inspect the sub-base and accept in writing the sub-base surface planarity and compaction. The Installer shall have the dimensions of the field and locations for markings measured by a registered surveyor to verify conformity to the specifications and applicable standards. A record of the finished field as-built measurements shall be made.
- D. The Turf Contractor shall provide the necessary testing data to the owner that the finished field meets the required shock attenuation, as per ASTM F1936.

#### 1.5 PRE-INSTALLATION MEETING

- A. Convene two weeks before starting work of this section.

#### 1.6 DELIVERY, STORAGE, AND PROTECTION

- A. Deliver products to project site in wrapped condition.
- B. Store products under cover and elevated above grade.

#### 1.7 WARRANTIES

- A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.
- B. The turf Manufacturer shall provide a Warranty to the owner that covers defects in materials and workmanship of the turf for a period of 8 years from the date of Substantial Completion. The turf manufacturer must verify that their onsite representative has inspected the installation and that the work conforms to the manufacturer's requirements.
- C. The Manufacturer's Warranty shall include general wear and damage caused from UV degradation. The warranty shall specifically exclude vandalism, and acts of God beyond the control of the owner or the manufacturer.
- D. The turf Manufacturer's Warranty must be supported by a pre-paid in advance insurance policy for the full eight (8) year period.
- E. The Turf Contractor shall provide a Warranty to the owner that covers defects in the installation workmanship, and further warrant that the installation was done in accordance with both the Manufacturer's recommendations and any written directives of the Manufacturer's onsite representative.
- F. All turf warranties shall be non-prorated, limited to repair or replacement of the affected areas, at the option of the Manufacturer, and shall include all necessary materials, labor, transportation costs, etc. to complete said repairs. All warranties are contingent on the full payment by the Owner of all pertinent invoices.
- G. The artificial grass field turf must maintain an ASTM 355 G-max of between 125- 200 for the life of the Warranty.

#### 1.8 MAINTENANCE SERVICE

- A. The Turf Contractor will train the Owner's facility maintenance staff in the use of the turf Manufacturer's recommended groomer.

### **PART 2 - PRODUCTS**

#### 2.1 MANUFACTURERS

- A. Approved manufacturers are as follows:
  - 1. FieldTurf International Inc.; 5211 Mitchell Bridge Road; Dalton, GA 30721;

USA; Tel: (800)724-2969

- a. Model: FieldTurf Double Play Classic for Baseball and Softball Field
- 2. Shaw Sports Turf.; 185 South Industrial Boulevard, Calhoun, GA 30701;  
 USA; Tel: (866)703-4004  
 a. Model: Truhop 46 for Baseball and Softball Field
- 3. AstroTurf.; 2680 Abutment Rd, Dalton, GA 30721;  
 USA; Tel: (800)723-8873  
 a. Model: Diamond Series RBI for Baseball and Softball Field
- 4. SporTurf.; 200 Howell Drive, Dalton, GA 30721;  
 USA; Tel: (800)798-1056  
 a. Model: Fielder's Choice for Baseball and Softball Field
- 5. Hellas.; 12710 Research Boulevard Suite 240, Austin Texas 78759;  
 USA; Tel: (800)798-1056  
 a. Model: Major Play for Baseball and Softball Field

## 2.2 MATERIALS

A. The component materials of the artificial grass field turf System consist of:

- 1. A Carpet made of polyethylene fibers tufted into a fibrous, non-perforated, porous backing.
- 2. An Infill that is a controlled mixture of graded sand and rubber crumb that partially covers the carpet.
- 3. Glue, thread, paint, seaming fabric and other materials used to install and mark the artificial grass field turf.

B. The installed artificial grass field turf shall have the following properties: Standard Property

Specification

ASTM D1577	Fiber Denier	<del>8000 nominal</del>
ASTM D418/D5848	Pile Height	<del>2" nominal</del>
ASTM D418/D5848	Pile Weight	<del>33-oz./sq.-yd.</del>
ASTM D1335	Tuft Bind	7 lbs. (without infill)
ASTM D1335	Tuft Bind	12 lbs. (with
infill) ASTM D1682/D5034	Grab Tear (width)	207 lbs/force
ASTM D1682/D5034	Grab Tear (length)	297 lbs/force ASTM
F1015	Relative Abrasiveness Index	20.2
ASTM D4491	Carpet Permeability	>30
inches/hour ASTM D2859	Flammability (Pill Burn)	Pass
ASTM F355/F1936	Impact Attenuation, Gmax	=<135 at installation
		=<200 over field life

C. The Carpet shall consist of fibers tufted into a primary backing with a secondary backing.

- 1. The Carpet shall be furnished in 15' wide rolls. Rolls shall be long enough to go from sideline to sideline without splicing. The perimeter white line shall be tufted into the individual sideline

rolls. Head seams, other than at sidelines, will not be acceptable

2. The Carpet's primary backing shall be a double-layered polypropylene fabric treated with UV inhibitors. The secondary backing shall consist of an application of porous, heat-activated urethane to permanently lock the fiber tufts in place. Perforated (with punched holes), backed carpet shall not be acceptable
  3. The fiber shall be 8,000 denier, low friction, UV-resistant fiber measuring not less than 2 ½ inches high. The same fiber from the above listed projects (Section 1.04, art. C. 5) must be used on this project. Systems with less than a 2 ½ - inch fiber and/or shock pad enhancements will not be accepted as equivalent.
  4. The fiber tufts shall be fanned or unfolded prior to installation, rolling or spiraling is not acceptable.
- D. The Infill materials shall be approved by the Manufacturer. The Infill shall consist of a resilient layered granular system, comprising selected and graded dust-free silica sand and cryogenically hammer-milled SBR rubber crumb. Artificial Grass products without cryogenically processed rubber or a finish application of straight rubber cryogenically processed will not be acceptable. The sand component of the infill must represent a minimum of 51% or more of the total infill, by weight.
- E. Non-tufted or inlaid lines and markings shall be in laid and must be approved by the synthetic turf Manufacturer.
- F. Thread for sewing seams of turf shall be as recommended by the synthetic turf Manufacturer.
- G. Glue and seaming fabric for inlaying lines and markings shall be as recommended by the synthetic turf Manufacturer.

### 2.3 FIELD GROOMER

- A. Supply a field groomer, which shall include a towing mechanism compatible with a field utility vehicle.
- B. The field groomer shall be provided by turf manufacturer

## PART 3 – EXECUTION

### 3.1 GENERAL

- A. The installation shall be performed in full compliance with approved Shop Drawings.
- B. Only trained technicians, skilled in the installation of athletic caliber synthetic turf systems working under the direct supervision of the approved installer supervisors, shall undertake any cutting, sewing, gluing, shearing, topdressing or brushing operations.
- C. The designated Supervisory personnel on the project must be certified, in writing by the turf Manufacturer, as competent in the installation of this material, including sewing seams and proper installation of the Infill mixture.
- D. All designs, markings, layouts, and materials shall conform to all currently applicable National High school federation rules and other standards that may apply to this type of synthetic grass installation.

### 3.2 EXAMINATION

- A. Verify that all sub-base, drainage and leveling is complete prior to installation.
- B. The surface to receive the synthetic turf shall be inspected by the Installer, and prior to the beginning of installation, the Installer must accept in writing the sub- base surface planarity and compaction. The surface must be perfectly clean as installation commences and shall be maintained in that condition throughout the process.
- C. The compaction of the aggregate base shall be 95%, according to the Modified Proctor procedure (ASTM D1557), and the surface tolerance shall not exceed 0- 1/4 inch over 10 feet and 0-1/2" from design grade.

### 3.3 INSTALLATION

- A. Install in accordance with Manufacturer's instructions. The Turf contractor shall strictly adhere to the installation procedures outlined under this section. Any variance from these requirements must be accepted in writing, by the Manufacturer's onsite representative, and submitted to the Architect/Owner, verifying that the changes do not in any way affect the warranty. Infill materials shall be approved by the Manufacturer and installed in accordance with the Manufacturer's standard procedures.
- B. The carpet rolls are to be installed directly over the properly prepared aggregate base. Extreme care should be taken to avoid disturbing the aggregate base, both in regard to compaction and planarity. It is suggested that a 2-5 ton static roller is on site and available to repair and properly compact any disturbed areas of the aggregate base.
- C. The full width rolls shall be laid out across the field. Turf shall be of sufficient length to permit full cross-field installation from sideline to sideline. No head or cross seams will be allowed in the main playing area between the sidelines. Utilizing standard state of the art sewing procedures each roll shall be attached to the next. When all of the rolls of the playing surface have been installed, the sideline areas shall be installed at right angles to the playing field turf.
- D. This is a 99% sewn installation. Gluing of rolls shall not be acceptable. Minimum gluing will only be permitted to repair problem areas, corner completions, and to cut in any logos or inlaid lines as required by the specifications. All seams shall be sewn using double bagger stitches and polyester thread or adhered using seaming tape and high grade adhesive (per the manufacturer's standard procedures). Seams shall be flat, tight, and permanent with no separation or fraying.
- E. Infill materials shall be applied in numerous thin lifts. The turf shall be brushed as the mixture is applied. The infill material shall be installed to a depth determined by the Manufacturer.
- F. The Infill materials shall be installed to fill the voids between the fibers and allow the fibers to remain vertical and non-directional. The Infill installation consists of a base layer of sand followed by a homogenous mixture of the sand and the cryogenically processed rubber. A final application of specifically sized cryogenically processed rubber completes the system. The Infill shall be installed to the depth of 1 3/4". Infill density shall consist of no more than 7 pounds of sand and at least 3 pounds of rubber per square foot. The Infill shall be placed so that there is a void of 3/4" to the top of the fibers.
- G. Prior to the application of any line painting the turf shall be fibrillated by means of a nylon rotary brush to provide the look, feel, and safety of optimally maintained natural grass, including subtle undulations normally associated with natural grass athletic fields.
- H. Non-tufted or inlaid lines and markings shall be painted according to the recommendations of the turf Manufacturer and of the paint manufacturer. Several applications may be required.
- I. Synthetic turf shall be attached to the perimeter edge detail in accordance with the Manufacturer's standard procedures.

### 3.4 FIELD MARKINGS

- A. The field will have the following lines tufted or inlaid according to NCAA and/or HFHS standards:
  - 1. Baseball/Softball: as shown on the contract drawings. Color shall be white, except where noted.
    - a. Foul Lines
- B. Standards
  - 1. Standards; all lines and markings shall be to NCAA and/or NFHS Standards.
  - 2. Team logo as determined by Owner.

### 3.5 CLEANING

- A. Protect installed turf from subsequent construction operations.
- B. Do not permit traffic over unprotected floor surface.
- C. Contractor shall provide the labor, supplies, and equipment as necessary for final cleaning of surfaces and installed items.
- D. All usable remnants of new material shall become the property of the Owner.
- E. The Contractor shall keep the area clean throughout the project and clear of debris.
- F. Surfaces, recesses, enclosures, etc., shall be cleaned as necessary to leave the work area in a clean, immaculate condition ready for immediate occupancy and use by the Owner.

END OF SECTION 321813



## SECTION 32 91 00 – SYNTHETIC TRACK SURFACING SYSTEM

### 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. Provide all labor, materials, equipment, supervision, and services necessary for the proper completion of all synthetic track surfacing and related work indicated on the drawings and specified herein.
- B. Contractor shall refer to the drawings for the required locations of synthetic track surfacing to be installed. All quantities and dimensions shall be field verified by the synthetic surfacing contractor.
- C. Install a porous latex and rubber synthetic track system comprised of a base layer of black latex bound SBR rubber granules topped with a colored EPDM and latex, UV resistant top coat.
- D. Layout and paint all track lines and event markings as required and specified by appropriate governing body, IAAF, NCAA or NFHS.
- E. The contractor shall coordinate the work specified with an authorized and appointed representative of the owner so as to perform the work during a period and in a manner acceptable to the owner,

#### 1.3 CODES AND STANDARDS

##### A. Applicable Publications

- 1. Codes and standards follow the current guidelines set forth by International Associate of Athletics Federations, (IAAF), National Collegiate Athletic Association (NCAA), or the National Federation of State High School Association (NFHS), along with the current material testing guidelines as published by the American Society of Testing and Materials (ASTM).

##### B. Performance Standards

- 1. The new synthetic track surfacing system shall exhibit the following minimum performance standards (ASTM)
- 2. Thickness: (12-13mm) or as specified
- 3. Shore A Hardness: 45-60 (ASTM D-2240)
- 4. Elongation at Break: -75% (ASTM D-412)
- 5. Compression Set Recovery: 85%-90% over 24hr period (ASTM 395-89)
- 6. Abrasion Resistance: 0.25 grams loss after 1000 cycles (ASTM D-501) Coefficient of Friction: Dry: 0.75-0.85, Wet: 0.70-0.75 (ASTM D-1984) Resilience : 35%-41% (ASTM D-2632)
- 7. Tear Resistance: 45psi (ASTM D-624)



C. BASIS of DESIGN is Sport Track ST-55

1.4 SUBMITTALS

The following submittals must be received with bid:

1. Standard printed specifications of the synthetic track surfacing system to be installed on this project.
2. An affidavit attesting that the synthetic track surfacing material to be installed meets the requirements defined by the manufacturers currently published specifications and any modifications outlined in those technical specifications.
3. A synthetic track surfacing system sample, 4" x 4" in size, of the same synthetic surfacing system to be installed on this project.
4. An installation list of outdoor track facilities installed in the last two years using the exact synthetic track surfacing system specified herein.
5. Test results from an approved IAAF Testing Laboratory confirming compliance to the performance of athletic tracks test according to the IAAF.

1.5 QUALITY ASSURANCE

A. Synthetic Track Surface construction shall be performed only by Sports Field Contractors that have had the education, experience and training along with the following qualifications will be considered:

1. The synthetic surfacing contractor must be in business for five years in the installation of elastomeric latex and rubber synthetic track surfacing.
2. The synthetic surfacing contractor must have installed a minimum of five outdoor track facilities using the specified system, within the last two years.
3. The synthetic surfacing contractor shall be a builder member of the American Sports Builders Association.
4. The contractor is required to provide documentation that shows the selected specified and installed product meets IAAF Performance Specification for Synthetic Surfaced Athletics Tracks (Outdoor) and is certified in terms of the IAAF certification system as updated to present day.
5. The contractor shall also be required to have a full-time employee on staff with a "Certified Track Builder (CTB)" designation as awarded by the American Sports Builder's Association. A current CTB certification shall be included with the bid package for this project.
6. The manufacturer must offer a minimum of four (4) IAAF Certified Tracks Systems.

PART 2 – PRODUCTS

2.1 PRIMERS

A. Primers shall be water-based SBR latex, specifically formulated to be compatible with the paved asphalt/concrete base and track surfacing material.

2.2 BLACK SBR GRANULES

A. The rubber granules for the base course shall be recycled SBR rubber, processed and chopped to 1-5 mm size, midcourse 1-4mm in size, containing less than 4% dust.

### 2.3 COLORED EPDM GRANULES

- A. The rubber granules for the structural wearing coats shall be EPDM peroxide cured, synthetic rubber containing a minimum 20% EPDM resin (1-3mm) with a specific gravity of 1.50+/- 1 g/cubic centimeters. The EPDM rubber shall be the same color as chosen by the owner for the track surface. ~~Track surface color shall be RED.~~ Track surface to be chosen by Owner from manufacturer's full range of standard colors and custom colors.

### 2.4 LATEX BINDER

- A. A minimum 50% solids SBR latex resin used for latex track construction.

### 2.5 PIGMENTS

- A. Shall be ultra violet stabilized water based pigments.

### 2.6 LINE MARKING PAINT

- A. All line and event markings shall be applied by experienced personnel utilizing an acrylic paint compatible with the synthetic track surfacing

## PART 3 - EXECUTION

### 3.1 SUBBASE

- A. The synthetic track surfacing system shall be laid on an approved subbase. The general contractor shall provide compaction test results of 95% or greater for the installed subbase.
- B. For NCAA and IAAF certification the following criteria must be followed. The track surface, i.e. Asphalt substrate, shall have a maximum lateral slope outside to inside of 1.0% and a maximum slope of 0.1% in the running direction. The finished asphalt shall not vary under a 10' straight edge more than 1/8".
- C. It shall be the responsibility of the asphalt-paving contractor to flood the surface immediately after the asphalt is capable of handling traffic, but within 24 hours. If, after 20 minutes of drying time, there are birdbaths evident, it shall be the responsibility of the general contractor, in conjunction with the surfacing contractor, to determine the method of correction. No cold tar patching, skin patching or sand mix patching will be acceptable.
- D. Any oil spills (hydraulic, diesel, motor oil, etc) must be completely removed either by chipping out or removing and replacing with new, keyed in asphalt. The minimum depth of any asphalt replacement shall be 1 inch. The curing time for the asphalt base is 28 days. It shall be the responsibility of the surfacing contractor to determine if the asphalt substrate has cured sufficiently prior to the application of latex and rubber surfacing system.
- E. It shall be the responsibility of the general contractor to determine if the asphalt substrate meets all design specifications, i.e. Cross slopes, planarity and specific project criteria. After all the above

conditions are met, the synthetic surfacing contractor must, in writing, accept the planarity of the asphalt receiving base before work can commence.

### 3.2 THICKNESS

- A. The thickness of the Synthetic Track Surfacing System shall be 13mm, or as specified.

### 3.3 EQUIPMENT

- A. The Synthetic Track Surfacing System components shall be processed and installed in specially designed machinery and equipment. An approved mixer tank with mechanical agitation and the capability to maintain the required pressure for spraying.

### 3.4 INSTALLATION (.92 gallons of undiluted latex, 8.5lbs SBR rubber and 6lbs EPDM colored rubber)

- A. Prime coat of diluted latex applied at .07 gallons per square yard.
- B. Base rubber applied and oversprayed with .15 gallons of latex per square yard
- C. Mid course rubber applied and oversprayed with .15 gallons of latex per square yard
- D. Mid Course rubber applied and oversprayed with .15 gallons of latex per square yard
- E. EPDM rubber applied and oversprayed with .15 gallons of latex per square yard
- F. EPDM rubber applied and oversprayed with .15 gallons of latex per square yard

- G. Spray applied pigmented U.V. stabilized coat with .1 gallons of latex per square yard
- H. Promptly remove soil and debris created by turf work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.

### 3.5 SITE CONDITIONS

- A. Installation shall not take place if adjacent or concurrent construction generates excessive dust, abrasives or any other by-product that, in the opinion of the installer, would be harmful to the track material, until completion of such works.
- B. If, in the opinion of the installer of the synthetic material, the weather and/or climatic conditions are detrimental to the proper installation of the surfacing materials, work shall be delayed until conditions are acceptable. Preferred installation temperature is fifty degrees Fahrenheit and rising. Installation shall be executed only in dry conditions.

### 3.6 LINE STRIPING AND EVENT MARKING

- A. Layout
  - 1. Line striping and event markings shall be laid out in accordance with current IAAF, NCAA or NFHS rules
- B. Certification
  - 1. Upon completion of the installation, the owner shall be supplied with all necessary computations and drawings, as well as a letter of certification attesting to the accuracy of the markings.

### 3.7 GUARANTEE

- A. Synthetic track surfacing system shall be fully guaranteed against faulty workmanship and material failure for a period of 3 years from the date of acceptance.
- B. Synthetic surfacing material found to be defective as a result of faulty workmanship and/or material failure shall be replaced or repaired at not charge upon written notification within the guarantee period.

END OF SECTION 32 92 00