

## IMPORTANT INFORMATION TO BIDDERS

**It is YOUR responsibility to register with the office of Town Manager if you use the TOWN WEB SITE to download this RFP/BID. Failure to register may prevent you from receiving important addendums, changes or answers to questions submitted by other vendors regarding the specifications. The Town of Clinton assumes no responsibilities for defects and/or omissions in Bid responses due to failure to register with the Office of Town Manager.**

It is strongly recommended that you E-mail the following information to [mschettino@clintonct.org](mailto:mschettino@clintonct.org).

Name:

E-mail Address:

Phone:

Bid Name:

Bid Number:

SPECIFICATIONS  
FOR

BID #2023-12  
ARTIFICIAL TURF  
REPLACEMENT AT INDIAN  
RIVER RECREATION  
COMPLEX

PROJECT DESCRIPTION:

Project consists of the removal of the existing artificial turf and the furnishing and installation of a new artificial turf including in-fill.

TOWN MANAGER: KARL KILDUFF

PARK and RECREATION DIRECTOR: ROBERT POTTER

**LEGAL NOTICE  
TOWN OF CLINTON**

SEALED BIDS will be received until **11:00 a.m. Monday, September 18, 2023** the Office of the Town Manager, Andrews Memorial Town Hall, 54 E. Main Street, Clinton, Conn. 06413 at which time they will be opened and recorded for **Artificial Turf Replacement at Indian River Recreation Complex**. Bids received after the above date and time will be rejected. Bid Documents are available for download on the Town of Clinton website at [www.clintonct.org](http://www.clintonct.org).

The Town Manager reserves the right to reject any, or any part of, or all proposals; to waive informalities and technicalities and to accept the Bid which the Town deems to be in the best interest of the Town, whether or not it is the lowest dollar amount.

Karl Kilduff, Town Manager

PUBLISH:      New Haven Register  
DATE:          August 31, 2023

**TOWN OF CLINTON  
INFORMATION TO BIDDERS**

SEALED BIDS will be received at the Office of the Town Manager, Andrews Memorial Town Hall, 54 E. Main Street, Clinton, Conn. 06413 until **11:00 a.m. Monday, September 18, 2023**, at which time they will be opened and recorded for:

**Artificial Turf Replacement at Indian River Recreation Complex**

Bids received after the above stated time will be rejected. Bid Documents are available for download on the Town of Clinton website at [www.clintonct.org](http://www.clintonct.org).

Certificates of Insurance in a form acceptable to Town Counsel, will be submitted by the successful bidder upon written or verbal notification that the proposal has been accepted. Required insurance must be maintained for the duration of the contract.

Terms of payment, except when specified in the proposal, will be net 45 days after receipt of approved invoice. The Town of Clinton is exempt from taxes imposed by the Federal and State Governments including the Federal Transportation Tax. Such taxes should not be included in your proposal. Where applicable, freight charges, setup charges and any other charges are to be included in the total price to the Town.

Work performance must be in conformance with all OSHA regulations and all vehicles must meet Federal and State Department of Transportation rules and regulations governing their use in Connecticut. All equipment will be maintained in a safe clean working condition as intended by the manufacturer. Violation of this provision may result in immediate termination of contract.

When applicable, the Contractor assumes responsibility to conform to all local ordinances and to obtain all necessary permits before start of work. Certificates of Insurance shall include the Town of Clinton as an additional insured for the life of the Contract.

**Pursuant to Section 10-6 of the Town of Clinton Charter, the Town Manager may reject any and all bids, or waive informalities and technicalities. Bids received after the above stated time will be rejected. No bid shall be accepted from or contract awarded to any person who is in arrears to the Town of Clinton on any tax, debt, or contract.**

## **GENERAL INFORMATION TO ALL RESPONDENTS**

The first page of each BID must be clearly labeled with the proposer's name, the name of a contact person within the proposer's organization, and the proposer's mailing address, telephone number, fax number, webpage address and email address.

To be considered, a vendor must submit a complete BID that satisfies all requirements and addresses all information requested or specified in this BID.

The Town reserves the right to amend or withdraw this BID at any time prior to the deadline date for submission of proposals. If this BID is amended, the Town will notify each REGISTERED proposer in writing, via email.

When quantities are listed in these specifications they may be increased or decreased by the Town of Clinton, depending upon its actual requirements.

The Town of Clinton is an equal opportunity employer and we advise you of our intent to negotiate business only with other equal opportunity employers. All Contractors and subcontractors with whom we contract are obligated to provide equal opportunity without regard to race, creed, color, national origin, age, sex or handicap.

Bids must be submitted on proposal forms attached hereto. Bids received later than the time and date specified will not be considered.

No bid shall be accepted from, or contract awarded to any person who is in arrears to the Town of Clinton on any tax, debt, or contract.

All questions are to be submitted by email. Only questions submitted in this manner will be answered. All bidders will receive copies of questions and answers upon request.

All bid prices must include prepaid delivery, assembly and/or installation (ready for operation and/ or use) of all equipment and/or materials to the individual location(s) as designated by the Town of Clinton. All bid prices are to be submitted on the sheets provided on this bid. Quantities and pricing are to be listed in accordance with these sheets.

Bidders offering(s) under this bid must meet and be in compliance with all local, state and federal specifications, regulations and requirements pertaining to the work, materials, equipment or items requested in the bid.

The successful bidder, vendor and/or contractor must protect all property of the Town of Clinton, (i.e., all floors, furniture, grass, land, etc.) from injury or other damage. Any damage so caused must be repaired by contractor/vendor at his/her own expense.

At the completion of the work the vendor and/or contractor must remove from the premises all surplus materials and all debris created by him. He must leave the premises in a clean and

finished condition acceptable to the owner or its agents. It is the responsibility of the VENDOR to document before and after conditions.

Default - It shall be understood that a bidder supplying equipment and/or supplies will be considered to be in default if/when he/she has not delivered the item(s) within the time constraints listed in this document. Bidders providing a service and/or construction will be considered to be in default if/when they have failed to meet the completion date set forth in this document and/or they have ceased work on the project for a period of fifteen (15) working days cumulative or consecutive.

Samples that are forwarded by the bidder will be returned to the bidder at his request and at his expense. Samples not returned to the bidder will be disposed of at the discretion of the Town of Clinton or its designated representative. Large pieces of equipment submitted for evaluation and inspection are to be picked up by the bidder within thirty (30) days of bid opening date. Items not picked up within thirty (30) days of bid opening will be disposed of by the Town Clinton.

Any and all references to trade names, types, styles, models or catalogs are intended to be descriptive only and not restrictive. The intention is to indicate to bidders the type and quality of the articles and/or materials that will be satisfactory. Bids received on other makes or models with reference to other catalogs will be considered. The bidder is to clearly state in his bid exactly what he intends to furnish, and to furnish with his bid a cut or illustration or other descriptive matter that will clearly indicate and give specification as to the product he proposes to furnish. Where a bid is offered on an item other than the trade standard used in the specification the item should be identified on the bid form by entering the MAKE, TRADE NAME AND MODEL NUMBER. It is understood that any substitutes that might be offered are guaranteed by the bidder to be of equal or better quality than is requested in the bid. The item(s) offered must be equivalent as to function, basic design, type and quality of material, method of construction and any required dimensions. It shall be further understood that during original as well as subsequent shipments spot checks will be performed to insure that the items received are in fact the items offered in the bid. WHEN RECEIVED, SHOULD ITEMS/MATERIALS PROVE TO BE DIFFERENT IN ANY WAY, THE BIDDER AGREES TO THE RETURN OF THE ITEMS AND AGREES TO SUPPLY THE CORRECT ITEMS (PER BID SPECIFICATIONS) AT THE BIDDER'S EXPENSE.

Bidders are cautioned that surplus, seconds, factory rejects, close-outs or distressed items are not acceptable and shipment of substitutions, defective or shop-worn equipment will be returned for a full refund at the vendor's expense.

The quantities and/or material listed in the specifications may be increased or decreased by the Town of Clinton or its designated representative based on actual need at the time the orders are placed.

The Town of Clinton or its designated representative reserves the right to reject any proposal in whole or part offering equipment and/or materials and/or services that in his/her opinion does not meet the quality standards desired. Such decision will be considered final and not subject to further recourse by the bidder.

The Town of Clinton or its designated agent reserves the right to award or reject by item, or part thereof, groups of items, or parts thereof, or all items of the bid and to award contracts to one or more bidders submitting identical proposals as to price, to reject any and all bids in whole or in part, to waive technical defects, irregularities and omissions if, in his/her judgment the best interest of the town will be served.

The Town of Clinton specifically reserves the right to reject any and all bids until a purchase order and/or contract has been awarded, no bidder can claim any contract rights by virtue of bidding alone. Awarding of the contract means actual written notice by letter and a properly executed purchase order to the bidder or bidders that the contract has been awarded.

It is the intent to award this bid by line item; however the Town of Clinton reserves the right to award the bid in total if it is deemed by the Town of Clinton that the award in total would be in the best interest of the Town. In addition, bidders should be advised that should budgetary constraints dictate, part and/or all the items listed in this bid may be rejected. This decision(s) shall be considered final and not subject to recourse by the bidder.

**WHERE A BID BOND IS REQUIRED, IT IS TO BE SUBMITTED WITH THE BID  
AT THE TIME OF SUBMISSION. (See page 12)**

Bid Bond - shall be in the amount equivalent to ten percent (10%) of the contract made out in favor of the Town of Clinton and issued by a surety company acceptable to and approved by the Town of Clinton.

**WHERE A PERFORMANCE BOND IS REQUIRED, IT IS TO BE SUBMITTED AFTER AWARD OF  
BID AND PRIOR TO CONTRACT EXECUTION. (See page 12)**

Performance Bond - the bidder whose proposal shall be accepted shall file a performance bond and execute said contract within fifteen (15) days from the date of notification of such award. The bond furnished must be in favor of the Town of Clinton and executed by a surety company authorized to transact business in the State of Connecticut and acceptable and approved by the Town of Clinton. It shall be for not less than one hundred percent (100%) of the total contract price but in no case less than one thousand dollars (\$1,000).

**WHERE A PAYMENT BOND IS REQUIRED, IT IS TO BE SUBMITTED AFTER AWARD OF BID  
AND PRIOR TO CONTRACT EXECUTION. (See page 12)**

Payment Bond - if requested by the Town of Clinton, bidder whose proposal shall be accepted shall file a payment bond and execute said contract within fifteen (15) days from the date of notification of such award. The bond furnished must be in favor of the Town of Clinton and executed by a surety company authorized to transact business in the State of Connecticut and acceptable and approved by the Town of Clinton. It shall be for not less than one hundred percent (100%) of the total contract price but in no case less than one thousand dollars (\$1,000).

The Town of Clinton reserves the right to require successful bidder(s) to enter into such security arrangements as are deemed necessary to protect the Town of Clinton property and goods.

Facsimile Transmissions - Submission of this bid or any portion of this bid and/or any documents relating to the bid by means of Facsimile Transmission (fax machine) is unacceptable and will not be considered in the bid process.

The bidder agrees to obtain all work/building permit(s) as might be required. The cost of obtaining said permit(s) shall be included in the bid price(s). In addition, it shall be understood where property lines are to be considered, bidders are to verify said lines/measurements with proper Town Officials prior to commencement of work.

In connection with the execution of this bid, subsequent purchase orders and/or contracts, the seller shall not discriminate against any employee or applicant for employment because of age, race, religion, color, sex or national origin.

The successful bidder shall not employ any subcontractor to fulfill any of the duties as herein specified without express, prior written approval of the Town of Clinton or its designated representative.

Material Safety Data Sheet (MSDS) - the successful bidder must warrant that any chemicals supplied hereunder will contain appropriate warning labels, cautioning instructions and notices. In addition, any chemical products supplied in bulk and/or used in the execution of this bid and/or its content, bidder agrees to furnish as directed, sufficient copies of the products MSDS and a supply of labels and cautionary instruction notices to be used in the plant(s).

The successful bidder must warrant that he has supplied all appropriate information that he is aware of concerning any potential hazards involved in the use, handling, transportation, labeling, storage or disposal of any/all chemicals and/or materials supplied and/or used in the execution of this bid and/or its contents.

The successful bidder must warrant that he has supplied any data on the possible toxic or harmful effect the chemicals provided and/or used may have and the precautions the Town of Clinton should take to eliminate or minimize those risks.

When the State of Connecticut Prevailing Wage Rate is applicable to the bid, it is to be known by the prospective bidders that a Certified Payroll Record must be forwarded prior to any request and/ or invoice for payment(s).

Machines and/or Equipment (lockout/tag out) - In an effort to comply with OSHA's final rule on control of hazardous energy sources, vendors must warrant that any and all machines and/or equipment as is covered under this bid will be supplied and/or installed equipped with lockout/tag out devices as prescribed by OSHA.

All energy isolating devices must be designed to accept a lockout device, as required by OSHA lockout/tag out requirements, 29 C.F.R. 1910.147(C)(2)(iii). 54 Fed. Reg. 36681, 36688 (September 1, 1989). For this purpose, an "energy isolating device" is a mechanical device



that physically prevents the transmission or release of energy (such as a valve), and "lockout device" is a device that uses a positive means, such as a lock, to hold an energy isolating device in the safe position and prevent the energizing of a machine or equipment.

The successful bidder shall agree that any award resulting from this bid will be extended to any/ all departments and agencies of the Town of Clinton and that the successful vendor shall invoice said Town agency and/or department separately.

The terms and contents of these general bid terms and conditions are made a part of this bid.

## **GENERAL SCOPE OF WORK:**

The Town of Clinton is seeking BIDS for the Replacement of the Artificial Turf Soccer Field at the Indian River Recreation Complex . Bid Price shall include all costs associated with this work.

### **General Specifications**

Work included in this Bid generally consists of removal and disposal of the existing artificial turf and the furnishing and installation of new artificial turf as specified herein.

### **Questions:**

All questions will be submitted by Thursday, September 7, 2023.

Only questions submitted by e-mail will be addressed. Please submit all questions to: [rpotter@clintonct.org](mailto:rpotter@clintonct.org)

Copy to: [mschettino@clintonct.org](mailto:mschettino@clintonct.org)

### **Please complete all requested information in this package:**

- Page 13 Exception to the Bid (must be signed even if there are no exceptions)
- Page 15-14 Bid Proposal Form

**You are responsible to read the entire document.**

**BID DIRECTIONS:** Bids to be considered must be presented on the sheets provided within this bid. Additional information sheets may be attached. No bidder may withdraw his bid for a period of 45 days after the opening date. Prices must hold for at least 90 days after opening.

Bid bond is required with this bid: (with submittal of bid, see Page 8)	<div>YES</div>
Performance bond will be required: (prior to contract execution, see page 8)	<div>YES</div>
Payment bond will be required: (prior to contract execution, see page 8)	<div>NO</div>
This is a prevailing wage project:	<div>YES</div>
Material samples are required with this bid:	<div>YES</div>
Descriptive and/or material specifications are to be submitted with your bid:	<div>YES</div>
Proof of insurance required: (prior to execution of contract, see page 16)	<div>YES</div>
References Required	<div>YES</div>

Other:

Contractor shall agree to maintain in force at all times during which services are to be performed the following coverages and shall name the Town of Clinton as an Additional Insured on a primary and non-contributory basis to the Contractor's Commercial General Liability and Automobile Liability policies. **These requirements shall be clearly stated in the remarks section on the bidders Certificate of Insurance.** Insurance shall be written with Carriers approved in the State of Connecticut and with a minimum Best's Rating of A-. In addition, all Carriers are subject to approval by the Town of Clinton.

		(Minimum Limits)
General Liability:	Each Occurrence	\$1,000,000
	General Aggregate	\$2,000,000
	Products/Completed Operations Aggregate	\$2,000,000

**A Waiver of Subrogation shall be provided**

Auto Liability:	Combined Single Limit	\$1,000,000
	Each Accident	\$1,000,000
Umbrella:	Each Occurrence	\$5,000,000
(Excess Liability)	Aggregate	\$5,000,000

Workers' Compensation and WC Statutory Limits		
Employers' Liability	EL Each Accident	\$500,000
	EL Disease Each Employee	\$500,000
	EL Disease Policy Limit	\$500,000

**A Certificate of Insurance:** documenting the coverage listed above must be presented by your company prior to the commencing of any work or service. The Contractor or Vendor also agree to provide replacement and/or renewal certificates at least 30 days prior to the expiration of each policy.

If any policy is written on a "Claims Made" basis, the policy must be continually renewed for a minimum of two (2) years following the completion date of the work and/or service. If the claims-made policy is replaced and/or the retroactive date is changed, then the expiring policy must be endorsed to extend the reporting period for claims two (2) years from completion date.

**A copy of the Declaration Pages:** Will be provided to the Town.

**An Additionally Insured Endorsement:** A letter stating that the Town is listed as additional insured from the Insurance carrier.

**Exclusions to the Policy:** A statement of exclusions to all policies will be submitted prior to the award of contract.

## EXCEPTIONS

**No exceptions to the bid will be considered after award and acceptance by the contractor unless such exceptions are noted as part of your bid response. Please note any exceptions to the bid in your response.**

**We take EXCEPTION to the following specifications and/or requirements in the bid document:**

**We propose the following SUBSTITUTION for the excepted specifications and/or regulations:**

**NO EXCEPTIONS ARE NOTED TO THE BID**

Name (printed):

Signature:  Date:

## BID FORM

BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the unit prices or lump sums specified.

### ARTIFICIAL TURF

Item No.	Estimated Quantity	Description	Unit Price	Total Price
1.	91,046 S.F.	Remove Existing Artificial Turf , complete, price per square foot _____ dollars and _____ cents.	\$ _____	\$ _____
2.	91,046 S.F.	Dispose of Existing Artificial Turf , complete, as specified ,price per square foot _____ dollars and _____ cents.	\$ _____	\$ _____
3.	91,046 S.F.	Furnish and Install New Artificial Turf as specified, complete, price per square foot _____ dollars and _____ cents.	\$ _____	\$ _____
4.	91,046 S.F.	Furnish and Install New In-fill , as specified, price per square foot _____ dollars and _____ cents.	\$ _____	\$ _____

Total Base Bid (in numbers) \$ \_\_\_\_\_

Total Price (in words) \$ \_\_\_\_\_

### ALTERNATE BID ITEMS

A-1.	500 L.F.	Remove and Replace Wood Nailer Board, as approved, price per linear foot _____ Dollars and _____ cents.	\$ _____	\$ _____
A- 2.	Lump Sum	Furnish and Install Center Field Logo , as specified, lump sum price _____ dollars and _____ cents.	\$ _____	\$ _____

Proposer's Name:

Date:

Company Name:

Phone:

Contact Person:

Phone:

Street Address:

Town:

State:

ZIP Code:

E-mail Address:

FAX:

**Operating as:**

and duly licensed to performed the required work in the State of Connecticut and herein now known as the BIDDER agrees by submission of this BID, certifies, and in the case of a joint BID, each party thereto certifies as to his own organization, that this BID has been arrived at independently, without consultation, communication, or other agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

Submitted by (printed):

Date:

Signature:

Title:

## **SUBMITTING PROCEDURES**

Bids may be considered INCOMPLETE if the following conditions are not met.

1. All forms must be filled out completely
2. Bid Documents must be submitted as a complete set. Do not omit any pages
3. TWO (2) complete copies of your bid proposal must be submitted.
4. Bids are DUE in the Office of Town Manager prior to the advertised deadline. It is your responsibility to use whatever means necessary to assure that they are delivered on time.
5. Bids will be submitted in a sealed envelope and clearly marked with your name, the company name and the Bid #(number)

It is suggested if you have any questions on the submittal process that you contact Mary Schettino, 860-669-9333 or [mschettino@clintonct.org](mailto:mschettino@clintonct.org) prior to the submittal deadline.



# **TECHNICAL SPECIFICATION**

## **SECTION 02535 - SYNTHETIC IN-FILL TURF SYSTEM**

### **1.0 GENERAL REQUIREMENTS - SPIKE ZONE PRO™ 2.0**

#### ***1.1 Related Documents***

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this section.

#### ***1.2 Scope of Work***

- A. Furnish all labor, materials, tools, and equipment necessary to install, in place, all synthetic turf material 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 written installation instructions, and in accordance with all approved shop drawings.
- B. Prior to order of materials, the Synthetic Turf Contractor shall submit the following:
  - 1. Product data, including Independent Laboratory Test Results
  - 2. Installation details
  - 3. Sample Warranty
  - 4. Field layout and striping plans
  - 5. Details on construction, especially any details that may deviate from plans and specifications.
- C. Prior to the beginning of installation, the Synthetic Turf Contractor of the synthetic turf shall verify the base for planarity. Upon written confirmation from the base contractor that compaction/planarity and drainage/permeability specifications have been achieved, the installation of synthetic turf will proceed as arranged.
- D. Prior to Final Acceptance, the Synthetic Turf Contractor shall submit to the Owner three (3) copies of Executed Warranty Documents and Maintenance Manuals, which will include necessary instructions for the proper care and preventative maintenance of the synthetic turf system, including painting and striping.

#### ***1.3 Shop Drawings***

- A. Shop drawings shall be prepared and contain all pertinent information regarding installation. These drawings shall be submitted to the Owner or Owner's representative for approval prior to the manufacturing and shipment of materials.
- B. Submit drawings for:
  - 1. Installation details, edge detail, goal post detail, other inserts, and covers, etc., as required by contract.
  - 2. Striping plan showing any field lines, markings and boundaries, and field logos per project drawings.

#### ***1.4 Quality Assurance***

- A. Synthetic Turf Manufacturer is defined as:
  - 1. A company specializing in the design and manufacturing of infilled turf systems with not less than ten (10) years documented experience.
  - 2. The Synthetic Turf Manufacturer must have been in business under the same ownership for at least ten (10) years, and shall have been installing similar sports fields for that entire period.
  - 3. Manufacturer shall have an experienced technical services and sales professional who is available during the course of the work to meet personally with the Owner, Contractor, and Landscape Architect.
- B. Synthetic Turf Manufacturer's Experience:
  - 1. The Synthetic Turf Manufacturer shall have the experience of at least one hundred (100) acceptable installations of full-size fields (minimum 65,000 sq. ft.) in the United States within the past twelve (12) months of tufted, polyethylene grass-like fabrics with infill. Submit a list of all applicable installations with the bid.
  - 2. The Synthetic Turf Manufacturer shall have the experience of one hundred (100) acceptable installations (minimum 65,000 sq. ft.) of fields that are at least eight (8) years old. Submit a list of all applicable installations with the bid.
  - 3. The Synthetic Turf Manufacturer shall have the experience of fifty (50) acceptable installations of the specific fiber system specified. (turf system with thatch layer) . Submit a list of all applicable installations with the bid.
  - 4. The Synthetic Turf Manufacturer must be a certified member of the Synthetic Turf Council in good standing.
  - 5. The Synthetic Turf Manufacturer must have and operate its own extensive research and development laboratory. This laboratory must include testing devices for the following tests: Yarn Tensile Strength, Yarn Elongation, Tuft Bind, Grab Tear Strength, Seam Strength, g-max, Force Reduction, Vertical Deformation, Ball Roll, Ball Rebound, Rotational Resistance, Linear Traction, Relative Abrasive Index, UV Resistance, Flammability, and Simulated Aging.
  - 6. Manufacturer must have an ISO 17025 Accredited Laboratory in place at the time of manufacturing to verify product standards and quality. Manufactures without an ISO 17025 Accredited Laboratory will not be accepted.
  - 7. Testing of the synthetic turf system is mandatory and must be provided from a laboratory that is accredited by the NVLAP. Testing from laboratories that are not NVLAP accredited will not be accepted. The National Institute of Standards and Technology (NIST) is part of the U.S. Department of Commerce and administers the National Voluntary Laboratory Accreditation Program (NVLAP). Accreditation requirements are established in accordance with the U.S. Code of Federal Regulations (CFR, Title 15, Part 285), National Voluntary Laboratory Accreditation Program, and encompass the requirements of ISO/IEC 17025. Proof of independent testing of the system proposed to meet the specifications must be included with the bid.
  - 8. The Synthetic Turf Manufacturer must have manufactured and installed fields at every level of competition, including high school, college and professional.
  - 9. The Synthetic Turf Manufacturer must have at least five (5) NCAA Division 1 fields, (2) NFL game fields and two (2) MLB fields currently installed.
  - 10. The Synthetic Turf Manufacturer must not have had more than (5) five fields replaced, under warranty, during the past five (5) years.
  - 11. The Synthetic Turf Manufacturer must be vertically integrated including in-house tufting, polyethylene monofilament extrusion, in-house coating, polyurethane compounding, manufacture own primary backing, in-house yarn texturizing, ability and flexibility to tuft various gauge widths and have the ability to recycle used/old fields.

12. The Synthetic Turf Manufacturer must have a fully integrated quality system, directly based on and compliant with ISO 9000, ISO 14001 and OHSAS 18001 international standards.
  13. The Synthetic Turf System Vendor shall have the capability to remove, reclaim and recycle the synthetic turf system at the end of its useful life.  
The Synthetic Turf System Vendor must provide documentation outlining their product lifetime recycle / reuse program that is currently in place. A minimum of 5 fields must have been used in this process. All material must demonstrate the capability to reuse in a product that employs a cradle to cradle design. Reuse or other diversion plans that do not include production of a new and useful product will not be considered.
- C. Synthetic Turf Contractor is defined as:
1. A company that has built and installed a minimum of ten (10) infilled synthetic turf fields. Turf contractors and on-site superintendent shall provide a resume to provide proof of experience
    - a. At any time after award of the contract and before the completion of the project, should any member of the approved crew or subcontractor discontinue their relationship with the synthetic turf crew or subcontractor the Owner shall be notified. Failure to provide personnel meeting the minimum qualifications shall be considered default of the contract requirements
- D. Warranty: The Synthetic Turf Contractor shall submit its Manufacturer's Warranty, which guarantees the usability and playability of the synthetic turf system for its intended uses for an eight (8) year period commencing with the date of Substantial Completion.
1. The warranty submitted must have the following characteristics:
    - a) Must provide full-field coverage for eight (8) years from date of Substantial Completion,
    - b) Must warrant materials and workmanship,
    - c) Must warrant that the materials installed meet or the product specifications within manufacturing tolerances,
    - d) Must have a provision to either repair or replace such portion of the installed materials that are no longer serviceable to maintain a serviceable and playable surface,
    - e) Must be a Manufacturer's warranty from a single source covering workmanship and all self-manufactured or procured materials,
    - f) Must not be limited to the amount of annual usage,
    - g) Must provide, at the time of bid, a copy of its pre-paid 3<sup>rd</sup> party insurance policy. This policy must have an annual aggregate amount of no less than \$60 million, and a per incident limit of no less than \$10 million per claim. The third party insurer must have an AM Best rating of A++ or better. Submit policy sample certificate with bid.

### ***1.5 Existing Conditions***

- A. If the surface on which the new synthetic turf is to be installed is an existing asphaltic/concrete base, the Synthetic Turf Contractor will be responsible for any damage due to negligence to the concrete during removal/installation of the synthetic turf system provided there are no failures below the surface which contribute to the damage.
- B. If the surface on which the new synthetic turf to be installed is a new asphaltic/concrete base or a new base of compacted, porous aggregate, the Synthetic

Turf Contractor will be responsible for any damage to the base during removal/installation of the synthetic turf system after the deficiencies (if any) have been corrected by the base contractor with respect to planarity, compaction, and drainage/permeability. New in ground equipment, football goal post (if any) and /or infield mix backfill within the contiguous synthetic turf limits or immediately adjacent thereto are to be installed prior to the installation of the synthetic turf system. Damage to the synthetic turf system during the installation of such materials is not the responsibility of the Synthetic Turf Contractor.

### ***1.6 Schedule***

- A. The Synthetic Turf Contractor shall complete all work on the synthetic turf system in accordance with the published project schedule, or as mutually agreed upon.
- B. The synthetic turf contractor will require unencumbered use of staging area within fifty (50) feet of the synthetic turf area(s) being installed in order to complete the work. The Synthetic Turf Contractor shall also be afforded unencumbered access through the construction site to reach the synthetic turf field area being installed.

### ***1.7 Surface Area***

- A. The Synthetic Turf Contractor is to verify all measurements.

### ***1.8 Utilities***

- A. Owner or Prime Contractor will supply necessary water, adequate lighting, and electricity for installation. Owner or Prime Contractor shall permit use of toilet and wash up facilities.

## **2.0 PRODUCTS**

### ***2.1 Approved Products:***

***Shaw Sports Turf: Spike Zone Pro/Coated SBR Rubber or Approved Equal.***

### ***2.2 Materials***

- A. Shall be tufted, polyethylene, grass-like fabric coated with a secondary backing of high-grade polyurethane. Refer to grid in section 2.2 H. The three fibers constituting the monofilament, slit film, and thatch fibers SHALL BE TUFTED THROUGH THE SAME NEEDLE in a grass-like fabric to a finished pile-height also specified in the grid. The monofilament fiber must have multiple contours in the fiber cross-section consisting of a four-peak wave. The contour angles of the surface must result in interference of the light rays reflected by the surface to produce a dull appearance to the turf surface. The fiber must exhibit a general decrease in thickness from the center of the cross section to each tip. The infill shall be green coated SBR crumb rubber.
- B. All components and their installation method shall be designed and manufactured for use on outdoor athletic fields. The materials as hereinafter specified should be able to withstand exposure in all climates, be resistant to insect infestation, rot, fungus, mildew, ultraviolet light and heat degradation, and shall have the basic characteristics

- C. of flow-through drainage, allowing free movement of surface runoff through the synthetic turf fabric where such water may flow to the existing base and into the field drainage system.
- D. The finished playing surface shall appear as mowed grass and shall resist abrasion and cutting from normal use.
- E. The polyethylene pile yarn shall be a 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.
- F. The system shall be tufted at the pile height and gauge listed in specification grid, refer to grid in section 2.2 H.
- G. The Primary Backing must be a multi-layer backing, contain UV stabilizers and must pass 3000 hours of QUV A testing, refer to grid in section 2.2 H.
- H. The Secondary Backing of high-grade polyurethane shall be applied to the Primary Backing. Secondary Backing adds resistance to water degradation and strengthens grip on fibers, refer to grid in 2.2 H.
- I. The entire backing shall be coated with holes perforated throughout the backing at the Synthetic Turf Manufacturer's recommended interval to allow for drainage. Partially coated backings or latex coating materials shall not be acceptable.

<b>Pile Yarn</b>	<b>Polyethelene Monofilament/Slit Film</b>	<b>METHOD</b>
Linear Density (Denier) Mono/Slit*	7,200/5,000/4,400	ASTM D 1577
Yarn Thickness Mono/Slit/Thatch	300/100/100 microns	ASTM D 3218
Pile Weight****	49 oz./yd <sup>2</sup>	ASTM D 5848
Finished Pile Height****	2.0	ASTM D 5823
Product Weight (total)***	77 oz./yd <sup>2</sup>	ASTM D 5848
Primary Backing Weight****	8 oz./yd <sup>2</sup>	ASTM D 5848
Secondary Coating Weight+	20 oz./yd <sup>2</sup>	ASTM D 5848
Fabric Width	15' (4.57m)	ASTM D 5793
Tuft Gauge	1/2"	ASTM D 5793
Grab Tear Strength Avg.	> 200 lb.-F	ASTM D 5034
Tuft Bind (Avg.)	> 10 lb.-F	ASTM D 1335
Infilltrometer	> 25	ASTM D3885

Except where noted the above specifications are nominal.

\* Values are +/- 8%. \*\*\*Values are +/- 10 oz. \*\*\*\*Values are +/- 5%. +Values are +/- 3 oz./yd<sup>2</sup>.

- J. Infill materials must conform to the grid in section 2.2 I. Infill shall be green coated SBR crumb rubber that is newly processed and has not been previously used in another synthetic turf installation.

Property	Standard	Specification
Rubber Granule Comp	N/A	Green Coated SBR
Rubber Granule Shape	EN 14955	Spherical, Moderate, Angular
Rubber Sieve Analysis	ASTM D 5644	10 / 20MESH (2.0mm – 0.85mm)
Sand Granule Shape	ASTM D442	Semi-rounded to rounded angularity
Sand Sieve Analysis	ASTM E11	20 / 40 MESH (0.85mm - 0.425 mm)
Infill Lbs. of Rubber	N/A	3.01 lbs.
Infill Lbs. of Sand	N/A	1.29 lbs.

- K. Perimeter edge details, underground storm sewer piping and connections, and goal post foundations required for the system shall be as detailed and recommended by the Design Professional, and as approved by the Owner. The cost for these embedded items shall be included in the Contractor's price along with the compacted, porous base.

### 3.0 EXECUTION

#### 3.1 General

- A. The installation shall be performed in full compliance with approved shop drawings.
- B. Only factory-trained technicians skilled in the installation of athletic caliber synthetic turf systems shall undertake the placement of the system.
- C. Subject to the requirements in Section 1.2(B), the surface to receive the synthetic turf shall be verified by the Synthetic Turf Contractor as ready for the installation of the synthetic turf system and must be perfectly clean as installation commences and shall be maintained in that condition throughout the process.

#### 3.2 Removal of Existing Turf

- A. Removal of the field requires 100% recycling of the existing synthetic turf and infill.
- B. The existing turf is to be cut into 7.5' wide panels. Turf shall be rolled up and shipped to a processing facility where the rolls are stored indoors while awaiting processing. Processing shall include extracting the infill from the turf, cleaning, drying and separating into sand and rubber components that are 99% clean and separated. Processing facility will have the experience with the process detailed of a minimum of 5 full size fields within the past year with their equipment and materials. Acceptable Processing Facility : APW Enterprises, LLC dba ART Recycling. (203)-733-9432.

#### 3.3 Installation

- A. The existing base and adjacent curbs/perimeter wood nailer shall be inspected by the Consultant and Turf installer. Based upon the Consultant's inspection, the Turf Installer shall replace all defective wood nailer's and fine grade the existing base suitably, including properly rolling and compacting the base to achieve a surface planarity within 1/4" in 10-feet (+0, -1/4").
- B. Subgrade and base shall be uniformly compacted to a minimum of 95% of maximum dry density. Care must be exercised to minimize segregation.

- C. The Synthetic Turf Project Superintendent and the Consultant shall thoroughly inspect all synthetic turf materials delivered to the site for both mixing and quantity to assure that the entire installation shall have sufficient material to maintain proper mixing ratios.
- D. Synthetic turf shall be loose-laid across the field, stretched, and attached to the perimeter edge detail. Synthetic turf shall be of sufficient length to permit full cross-field installation. No head or cross seams will be allowed except as needed for inlaid fabric striping or to accommodate programmed cut-outs.
- E. All seams shall be flat, tight, and permanent with no separation or fraying. Selvedge edges of all panels must be cut and discarded prior to being sewn together. A butt-stitch method of seaming must be implemented and a double-lock stitch with cord recommended by the Synthetic Turf Manufacturer shall be utilized. Bagger stitching is prohibited. Seaming tape is to be constructed of high tenacity, coated non-woven fabric. Inlaid markings shall be adhered to seaming tape with a high strength polyurethane adhesive applied per the Synthetic Turf Manufacturer's standard procedures for outdoor applications. All main fabric seams shall be transverse to the field direction (i.e. run perpendicularly across the field).
- F. Infill materials shall be properly applied in numerous lifts using special broadcasting equipment. The synthetic turf shall be raked and brushed properly as the mixture is applied. The infill materials can only be applied when the synthetic turf fabric is dry.
- G. *g*-Max (shock attenuation) test < 200 at installation.

#### ***3.4 Field Markings and Decorations***

- A. Field markings and decorations shall be installed in accordance with approved project shop drawings.

#### ***3.5 Clean Up***

- A. Synthetic Turf Contractor shall provide the labor, supplies, and equipment, as necessary, for final cleaning of the surfaces.
- B. The Synthetic Turf Contractor shall keep the area clean and clear of debris throughout the project.
- C. Surfaces, recesses, enclosures, etc., shall be cleaned as necessary to leave the work area in a clean, immaculate condition ready for immediate occupancy and