

DESCRIPTION: Newberry High School Track and Field

corporation, sole proprietorship, etc.

The Term "Offer" Means Your "Bid" or "Proposal". Must be submitted in a sealed package. Solicitation Number & Opening Date must appear on package exterior. See "Submitting Your Offer" provision.

SUBMIT YOUR SEALED OFFER REFERENCING SOLICITATION NUMBER, DATE AND TIME OF OPENING, AND PROCUREMENT OFFICER'S NAME TO THE ADDRESS AT THE RIGHT:		MAILING AND PHYSICAL ADDRESS: The School District of Newberry County Attn: Procurement Coordinator Bryan Gresham PO Box 718 / 3419 Main Street, Newberry, SC 29108	
SUBMIT OFFER BY: March 25, 2019 @ 2:00 PM (See "Deadline For Submission Of Offer" provision)			
NUMBER OF COPIES TO BE SUBMITTED: (1) original, (2) copies marked COPY			
-	RECEIVED BY: March 15, 20 March 19, 2019 by 5:00 pm	019 at 12:00 PM	(See "Questions From Offerors" provision) (See "Questions From Offerors" provision)
CONFERENCE TYPE: DATE & TIME:	Site Visit, Mandatory March 13, 2019 @ 10:00 am		District Administrative Offices 3419 Main Street, Newberry, SC 29108
INTENT TO AWARD Notice of Award and/or Intent to Award will be posted on the district website www.newberry.k12.sc.us & AWARD March 26, 2019 by 5:00 pm			

You must submit a signed copy of this form with Your Offer. By submitting a bid or proposal, You agree to be bound by the terms of the Solicitation. You agree to hold Your Offer open for a minimum of one hundred twenty (120) calendar days after the Opening Date.

NAME OF OFFEROR: (Full legal name of business submitting the offer	r)	OFFEROR'S TYPE OF ENTITY: (Check one)		
AUTHORIZED SIGNATURE:		□ Sole Proprietorship		
(Person signing must be authorized to submit binding offer to enter contract on behalf o	Corporate entity Federal ID #			
TITLE: (Business title of person signing above)		South Carolina Minority Vendor Minority Vendor #		
PRINTED NAME: (Printed name of person signing above)	DATE SIGNED	□ Other		
Instructions regarding Offeror's name: Any award issued will be issued to, and the contract will be formed with, the entity identified as the offeror above. An offer may be submitted by only one legal entity. The entity named as the offeror must be a single and distinct legal entity. Do not use the name of a branch office or a division of a larger entity if the branch or division is not a separate legal entity, <i>i.e.</i> , a separate				

I. GENERAL INSTRUCTIONS TO OFFERORS

<u>AMENDMENTS TO SOLICITATION</u>: (a) The Solicitation may be amended at any time prior to opening. All actual and prospective Offerors (b) shall acknowledge receipt of any amendment to this solicitation (1) by signing and returning the amendment, (2) by letter, or (3) by submitting a bid that indicates in some way that the offeror received the amendment. (c) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.

<u>AWARD NOTIFICATION</u>: Notice regarding the District's intent to award a contract will be posted on the district's website <u>www.newberry.k12.sc.us</u> on **March 26, 2019 by 5:00 pm** If the contract resulting from this Solicitation has a total or potential value in excess of fifty thousand dollars, but less than \$ 100,000.00 such notice will be sent to all Offerors responding to the Solicitation and any award will be effective the day such notice is given. Should the contract resulting from this Solicitation have a total or potential value of one hundred thousand dollars or more, such notice will be sent to all Offerors responding to the Solicitation and any award will not be effective until the eleventh day after such notice is given

<u>BID / PROPOSAL AS OFFER TO CONTRACT</u>: By submitting Your Bid or Proposal, You are offering to enter into a contract with School District of Newberry County. Without further action by either party, a binding contract shall result upon final award. Any award issued will be issued to, and the contract will be formed with, the entity identified as the Offeror on the Cover Page. An Offer may be submitted by only one legal entity; "joint bids" are not allowed.

<u>BID ACCEPTANCE PERIOD</u>: In order to withdraw Your Offer after the minimum period specified on the Cover Page, You must notify the Procurement Officer in writing.

BID IN ENGLISH & DOLLARS: Offers submitted in response to this solicitation shall be in the English language and in US dollars, unless otherwise permitted by the Solicitation.

<u>CERTIFICATE OF INDEPENDENT PRICE DETERMINATION:</u> GIVING FALSE, MISLEADING, OR INCOMPLETE INFORMATION ON THIS CERTIFICATION MAY RENDER YOU SUBJECT TO PROSECUTION UNDER SECTION 16-9-10 OF THE SOUTH CAROLINA CODE OF LAWS AND OTHER APPLICABLE LAWS.

(1) By submitting an offer, the offeror certifies that:

(A) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to-

- (i) Those prices;
- (ii) The intention to submit an offer; or
- (iii) The methods or factors used to calculate the prices offered.

(B) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and

(C) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.

(2) Each signature on the offer is considered to be a certification by the signatory that the signatory:

(A) Is the person in the offeror's organization responsible for determining the prices being offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this certification; or

(B)(i) Has been authorized, in writing, to act as agent for the offeror's principals in certifying that those principals have not participated, and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this certification [As used in this subdivision (b)(2)(i), the term "principals" means the person(s) in the offeror's organization responsible for determining the prices offered in this bid or proposal];

(ii) As an authorized agent, does certify that the principals referenced in subdivision (b)(2)(i) of this certification have not participated, and will not participate, in any action contrary to paragraphs (a)(1) through (a)(3) of this certification; and

(iii) As an agent, has not personally participated, and will not participate, in any action contrary to paragraphs (a)(1) through

(a)(3) of this certification.

(3) If the offeror deletes or modifies paragraph (a)(2) of this certification, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

CERTIFICATION REGARDING DEBARMENT AND OTHER RESPONSIBILITY MATTERS:

(1) By submitting an Offer, Offeror certifies, to the best of its knowledge and belief, that Offeror and/or any of its Principals-

(A) Are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any state or federal agency;

(B) Have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(C) Are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision.

(D) Offeror has not, within a three-year period preceding this offer, had one or more contracts terminated for default by any public (Federal, state, or local) entity.

(E) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

(2) Offeror shall provide immediate written notice to the Procurement Officer if, at any time prior to contract award, Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(3) If Offeror is unable to certify the representations stated in paragraph (1), Offer must submit a written explanation regarding its inability to make the certification. The certification will be considered in connection with a review of the Offeror's responsibility. Failure of the Offeror to furnish additional information as requested by the Procurement Officer may render the Offeror non-responsible.

(4) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (1) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(5) The certification in paragraph 1 of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly or in bad faith rendered an erroneous certification, in addition to other remedies available to the District, the Procurement Officer may terminate the contract resulting from this solicitation for default.

<u>COMPLETION OF FORMS / CORRECTION OF ERRORS</u>: All prices and notations should be printed in ink or typewritten. Errors should be crossed out, corrections entered and initialed by the person signing the bid. Do not modify the solicitation document itself (including bid schedule).

<u>DEADLINE FOR SUBMISSION OF OFFER</u>: Any offer received after the Procurement Officer or his/her designee has declared that the time set for opening has arrived, shall be rejected.

<u>DEFINITIONS</u> - Except as otherwise provided herein, the following definitions are applicable to all parts of the solicitation:

AMENDMENT means a document issued to supplement the original solicitation document.

BOARD means the School District of Newberry County Board of Trustees.

BUYER means the Procurement Officer.

CHANGE ORDER means any written alteration in specifications, delivery point, rate of delivery, period of performance, price, quantity, or other provisions of any contract accomplished by mutual agreement of the parties to the contract.

CONTRACT See clause entitled Contract Documents & Order of Precedence.

CONTRACT MODIFICATION means a written order signed by the Procurement Officer, directing the contractor to make changes which the changes clause of the contract authorizes the Procurement Officer to order without the consent of the

contractor.

CONTRACTOR means the Offeror receiving an award as a result of this solicitation.

COVER PAGE means the top page of the original solicitation on which the solicitation is identified by number. Offerors are cautioned that Amendments may modify information provided on the Cover Page.

OFFER means the bid or proposal submitted in response this solicitation. The terms Bid and Proposal are used interchangeably with the term Offer.

OFFEROR means the single legal entity submitting the offer. The term Proposer is used interchangeably with the term Offeror. See bidding provisions entitled Signing Your Offer and Bid/Proposal as Offer to Contract.

PROCUREMENT OFFICER means the person, or his successor, identified as such on the Cover Page.

YOU and YOUR means Offeror.

SOLICITATION means this document, including all its parts, attachments, and any Amendments.

SUBCONTRACTOR means any person having a contract to perform work or render service to Contractor as a part of the Contractor's agreement arising from this solicitation.

WORK means all labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations under the Contract.

<u>DISTRICT CLOSINGS</u>: If an emergency or unanticipated event interrupts normal District processes so that offers cannot be received at the Procurement Office designated for receipt of bids by the exact time specified in the solicitation, the time specified for receipt of offers will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which the District processes resume. In lieu of an automatic extension, an Amendment may be issued to reschedule bid opening. If District offices are closed at the time a pre-bid or pre-proposal conference is scheduled, an Amendment will be issued to reschedule the conference.

<u>DRUG FREE WORK PLACE CERTIFICATION</u>: The State of South Carolina has amended Title 44, code of Laws of South Carolina, 1976, relating to health, by adding Chapter 107, so as to enact the Drug-Free Workplace Act. (See Act No. 593, 1990 Acts and Joint Resolutions). By submission of a signed proposal, you are certifying that you will comply with this Act. (See Section 44-107-30)

<u>DUTY TO INQUIRE</u>: Offeror, by submitting an Offer, represents that it has read and understands the Solicitation and that its Offer is made in compliance with the Solicitation. Offerors are expected to examine the Solicitation thoroughly and should request an explanation of any ambiguities, discrepancies, errors, omissions, or conflicting statements in the Solicitation. Failure to do so will be at the Offeror's risk. Offeror assumes responsibility for any patent ambiguity in the Solicitation that Offeror does not bring to the District's attention.

ETHICS ACT (CERTIFICATE): By submitting an offer, the offeror certifies that the offeror has and will comply with, and has not, and will not, induce a person to violate Title 8, Chapter 13 of the South Carolina Code of Laws, as amended (ethics act). The following statutes require special attention: Section 8-13-700, regarding use of official position for financial gain; Section 8-13-705, regarding gifts to influence action of public official; Section 8-13-720, regarding offering money for advice or assistance of public official; Section 8-13-75, and 8-13-760, regarding restrictions on employment by former public official; Section 8-13-775, prohibiting public official with economic interests from acting on contracts; Section 8-13-790, regarding restrictions on contributions by contractor to candidate who participated in awarding of contract. The state may rescind any contract and recover all amounts expended as a result of any action taken in violation of this provision. If contractor participates, directly or indirectly, in the evaluation or award of public contracts, including without limitation, change orders or task orders regarding a public contract, contractor shall, if required by law to file such a statement, provide the statement required by Section 8-13-1150 to the procurement officer at the same time the law requires the statement to be filed.

<u>INFORMATION FOR OFFERORS TO SUBMIT</u>: Offeror shall submit a signed Cover Page and should submit all other information and documents requested in solicitation.

<u>PROCUREMENT AUTHROITY</u>: (a) All authority regarding the conduct of this procurement is vested solely with the responsible Procurement Officer. Unless specifically delegated in writing, the Procurement Officer is the only government official authorized to bind the government with regard to this procurement. (b) Purchasing Liability. The Procurement Officer is an employee of the School District of Newberry County acting on behalf of the District pursuant to their Procurement Code. Any contracts awarded as a result of this procurement are between the Contractor and the School District of Newberry County.

<u>PROCUREMENT CODE AVAILABLE</u>: The School District of Newberry County's Procurement Code, is available at http://www.newberry.k12.sc.us/

<u>PROTESTS</u>: (a) Solicitation - Any prospective proposer, offeror, contractor, or subcontractor who is aggrieved in connection with the solicitation of a contract shall protest within fifteen (15) days of the date of issuance of the applicable solicitation document at issue. (b) Intent to Award - Any actual proposer, offeror, contractor, or subcontractor who is aggrieved in connection with the intended award or award of a contract shall protest within ten (10) days of the date notification of award is posted in accordance with this code.

A protest shall be in writing, submitted to the appropriate chief Procurement Officer, and shall set forth the grounds of the protest and the relief requested with enough particularity to give notice of the issues to be decided. [§ 11-35-4210]

<u>PROTEST – ADDRESS</u>: Any protest must be submitted in writing to Jim Suber, Assistant Superintendent of Operations and Administration, PO Box 718 / 3419 Main Street, Newberry, SC 29108

<u>PUBLIC OPENING</u>: Not applicable for this RFP

<u>QUESTIONS FROM OFFERORS</u>: (a) Any prospective offeror desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing, either by mail or electronic communication (e-mail). Questions must be received by the Procurement Officer no later than **Date/Time listed on Page 1**. Label any communication regarding your questions with the name of the Procurement Officer, and the solicitation's title and number. **Oral explanations or instructions will not be binding**. All Questions will be answered via an Addendum, which will posted on the District's website, <u>www.newberry.k12.sc.us</u> on **Date/Time listed on Page 1**

<u>REJECTION/CANCELLATION</u>: The District may cancel this solicitation in whole or in part. The District may reject any or all proposals in whole or in part.

RESPONSIVENESS / IMPROPER OFFERS:

(a) Bid as Specified. Offers for supplies or services other than those specified will not be considered unless authorized by the Solicitation.

(b) Responsiveness. Any Offer which fails to conform to the material requirements of the Solicitation may be rejected as nonresponsive. Offers which impose conditions that modify material requirements of the Solicitation may be rejected. If a fixed price is required, an Offer will be rejected if the total possible cost to the District cannot be determined. Offerors will not be given an opportunity to correct any material nonconformity. Any deficiency resulting from a minor informality may be cured or waived at the sole discretion of the Procurement Officer. (Article 5, Section 1520.13)

(c) Price Reasonableness: Any offer may be rejected if the Procurement Officer determines in writing that it is unreasonable as to price. (Article 5, Section 1520.6.5.5).

(d) Unbalanced Bidding. The District may reject an Offer as nonresponsive if the prices bid are materially unbalanced between line items or sub-line items. A bid is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated in relation to cost for other work, and if there is a reasonable doubt that the bid will result in the lowest overall cost to the District even though it may be the low evaluated bid, or if it is so unbalanced as to be tantamount to allowing an advance payment.

<u>RESTRICTIONS APPLICABLE TO OFFERORS</u>: Violation of these restrictions may result in disqualification of your offer, suspension or debarment, and may constitute a violation of the state Ethics Act. (a) After issuance of the solicitation, all communications must be solely with the Procurement Officer. You agree not to discuss this procurement activity in any way with any other District employees, agents or officials. This restriction may be lifted by express written permission from the Procurement Officer. This restriction expires once a contract has been formed. (b) Unless otherwise approved in writing by the Procurement Officer, you agree not to give anything to any other District employees, agents or officials prior to award.

<u>SAMPLES-TESTING</u>: Free samples may be required for testing by the District's Facilities staff and/or an independent laboratory. If requested, your failure to provide a sample will result in rejection of your offer. Upon invoice, you agree to pay any reasonable cost incurred for this testing. Unless your sample is accompanied by a request for its return, your sample will not be returned. Your sample may be destroyed during testing.

<u>SIGNING YOUR OFFER</u>: Every Offer must be signed by the individual with actual authority to bind the Offeror. (a) If the Offeror is an individual, the Offer must be signed by that individual. If the Offeror is an individual doing business as a firm, the Offer must be submitted in the firm name, signed by the individual, and state that the individual is doing business as a firm. (b) If the Offeror is a partnership, the Offer must be submitted in the partnership name, followed by the words "by its Partner," and signed by a general partner. (c) If the Offeror is a corporation, the Offer must be submitted in the corporate name, followed by the signature and title of the person authorized to sign. (d) An Offer may be submitted by a joint venturer involving any combination of individuals, partnerships, or corporations. If the Offeror is a joint venture, the Offer must be submitted in the name of the Joint Venture and signed by every participant in the joint venture in the manner prescribed in paragraphs (a) through (c) above for each type of participant. (e) If an Offer is signed by an agent, other than as stated in subparagraphs (a) through (d) above, the Offer must state that is has been signed by an Agent. Upon request, Offeror must provide proof of the agent's authorization to bind the principal.

<u>SUBMITTING CONFIDENTIAL INFORMATION</u>: For every document Offeror submits in response to or with regard to this solicitation or request, Offeror must separately mark with the word "CONFIDENTIAL" every page, or portion thereof, that Offeror contends contains information that is exempt from public disclosure because it is either (a) a trade secret as defined in Section 30-4-

40(a)(1), or (b) privileged and confidential, as that phrase is used in Article 1, Section 410. For every document Offeror submits in response to or with regard to this solicitation or request, Offeror must separately mark with the words "TRADE SECRET" every page, or portion thereof, that Offeror contends contains a trade secret as that term is defined by Section 39-8-20 of the Trade Secrets Act. For every document Offeror submits in response to or with regard to this solicitation or request, Offeror must separately mark with the word "PROTECTED" every page, or portion thereof, that Offeror contends is protected by Article 5, Section 1810. All markings must be conspicuous; use color, bold, underlining, or some other method in order to conspicuously distinguish the mark from the other text. Do not mark your entire response (bid, proposal, quote, etc.) as confidential, trade secret, or protected. If your response or any part thereof, is improperly marked as confidential or trade secret or protected, the District may, in its sole discretion, determine it nonresponsive. If only portions of a page are subject to some protection, do not mark the entire page. By submitting a response to this solicitation or request. Offeror (1) agrees to the public disclosure of every page of every document regarding this solicitation or request that was submitted at any time prior to entering into a contract (including, but not limited to, documents contained in a response, documents submitted to clarify a response, and documents submitted during negotiations), unless the page is conspicuously marked "TRADE SECRET" or "CONFIDENTIAL" or "PROTECTED", (2) agrees that any information not marked, as required by these bidding instructions, as a "Trade Secret" is not a trade secret as defined by the Trade Secrets Act, and (3) agrees that, notwithstanding any claims or markings otherwise, any prices, commissions, discounts, or other financial figures used to determine the award, as well as the final contract amount, are subject to public disclosure. In determining whether to release documents, the District will detrimentally rely on Offeror's marking of documents, as required by these bidding instructions, as being either "Confidential" or "Trade Secret" or "PROTECTED". By submitting a response, Offeror agrees to defend, indemnify and hold harmless School District of Newberry County, its officers and employees, from every claim, demand, loss, expense, cost, damage or injury, including attorney's fees, arising out of or resulting from the District withholding information that Offeror marked as "confidential" or "trade secret" or "PROTECTED". (All references to S.C. Code of Laws.)

<u>SUBMITTING YOUR OFFER OR MODIFICATION</u>: (a) Offers and offer modifications shall be submitted in sealed envelopes or packages (unless submitted by electronic means) – (1) Addressed to the office specified in the Solicitation; and (2) Showing the time and date specified for opening, the solicitation number, and the name and address of the offeror. (b) If you are responding to more than one solicitation, each offer must be submitted in a different envelope or package. (c) Each Offeror must submit the number of copies indicated on the Cover Page. (d) Offerors using commercial carrier services shall ensure that the Offer is addressed and marked on the outermost envelope or wrapper as prescribed in paragraphs (a)(1) and (2) of this provision when delivered to the office specified in the Solicitation. (e) Facsimile or e-mail offers, modifications, or withdrawals, will not be considered unless authorized by the Solicitation. (f) Offers submitted by electronic commerce shall be considered only if the electronic commerce method was specifically stipulated or permitted by the solicitation. (g) It is the Offeror's responsibility to ensure that bids submitted by electronic commerce were received by the Procurement Officer.

<u>UNIT PRICE</u>: Unit price must be shown for each item. In determining award, unit prices will govern over extended prices unless otherwise stated.

<u>WITHDRAWAL OR CORRECTION OF OFFER</u>: Offers may be withdrawn by written notice received at any time before the exact time set for opening. If the Solicitation authorizes facsimile offers, offers may be withdrawn via facsimile received at any time before the exact time set for opening. A bid may be withdrawn in person by a proposer or its authorized representative if, before the exact time set for opening, the identity of the person requesting withdrawal is established and the person signs a receipt for the bid. The withdrawal and correction of Offers is governed by the District's Procurement Code Article 5 Section 1520.7.1.

II. SCOPE OF WORK

Introduction

It is the intent of The School District of Newberry County to seek qualified contractors to prepare sites for Track and Field events as specified below The district reserves the right to add Track and Field equipment to this contract, all pricing will be negoiated with the Awarded Contractor. Complete project drawings can be obtained by contacting District Procurement or the Project Engineer below:

Clay Cannon, PE RB Todd & Associates 7436 Broad River Road Suite 212 Irmo SC 29063 clay@rbtodd.com 803-781-3141 ext 303

If hard copies of plans are desired, there will be a \$25 non refundable fee required made to RB Todd & Associates.

Project Timelime:

It is anticipated that a Notice to Proceed will be given on May 13th, 2019 with a 60 day project schedule to substantial completion.

Location

Newberry High School Football Stadium, 3113 Main Street, Newberry, SC 29108

III. TECHNICAL SPECIFICATIONS

311000 – SITE CLEARING 312000 – EARTH MOVING 321123 – AGGREGATE BASE COURSE 321823 – TRACK AND FIELD SURFACE 329200 – GRASSING 334100 – STORM DRAINAGE

SECTION 311000 - SITE CLEARING

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Removing existing vegetation.
 - 2. Clearing and grubbing.
 - 3. Stripping and stockpiling topsoil.
 - 4. Removing above- and below-grade site improvements.
 - 5. Temporary erosion- and sedimentation-control measures.

1.3 DEFINITIONS

- A. Subsoil: All soil beneath the topsoil layer of the soil profile, and typified by the lack of organic matter and soil organisms.
- B. Surface Soil: Soil that is present at the top layer of the existing soil profile at the Project site. In undisturbed areas, the surface soil is typically topsoil; but in disturbed areas such as urban environments, the surface soil can be subsoil.
- C. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing inplace surface soil and is the zone where plant roots grow. Its appearance is generally friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 1 inch in diameter; and free of subsoil and weeds, roots, toxic materials, or other nonsoil materials.
- D. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction, and indicated on Drawings.
- E. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction.
- F. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.4 MATERIAL OWNERSHIP

A. Except for stripped topsoil and other materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.5 INFORMATIONAL SUBMITTALS

- A. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.
 - 1. Contractor to take detailed photographs or videotape of any damage to existing pavement/curb etc. that may existing within project area.
- B. Record Drawings: Identifying and accurately showing locations of capped utilities and other subsurface structural, electrical, and mechanical conditions.

1.6 QUALITY ASSURANCE

A. Preinstallation Conference: Conduct conference at Project Site with Owner and Architect inspector prior to site clearing operations.

1.7 PROJECT CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed traffic ways if required.
- B. Salvable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises where indicated.
- C. Utility Locator Service: Notify PUPS, City of Newberry, CNNGA, and District personnel for area where Project is located before site clearing. It is required that the Contractor conduct a private utility locate prior to any site clearing operations on private property.
- D. Do not commence site clearing operations until temporary erosion- and sedimentation-control measures are in place.
- E. Contractor to take measures to protect existing track surface for construction access. Contractor to provide plan of action for review with Engineer and Owner prior to mobilization. Any damage done to existing track by not following protection plan, shall be repaired at Contractor expense.
- F. Do not direct vehicle or equipment exhaust towards protection zones.
- G. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.
- H. Soil Stripping, Handling, and Stockpiling: Perform only when the topsoil is dry or slightly moist.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Satisfactory Soil Material: Requirements for satisfactory soil material are specified in Section 312000 "Earth Moving."
 - 1. Obtain approved borrow soil material off-site when satisfactory soil material is not available on-site.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Protect existing site improvements to remain from damage during construction.
 - 1. Restore any damaged improvements to their original condition.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings and requirements of authorities having jurisdiction.
- B. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- C. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
- D. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

3.3 EXISTING UTILITIES

- A. Contractor to coordinate with Owner to arrange for disconnecting and sealing indicated utilities that serve existing structures before site clearing,
 - 1. Verify that utilities have been disconnected and capped before proceeding with site clearing.
- B. Locate, identify, disconnect, and seal or cap utilities indicated to be removed or abandoned.

- 1. Arrange with utility companies to shut off indicated utilities.
- C. Interrupting Existing Utilities: 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:
 - 1. Notify Architect not less than two days in advance of proposed utility interruptions.
- D. Excavate for and remove underground utilities indicated to be removed.
- E. Removal of underground utilities is included in earthwork sections and with applicable fire suppression, plumbing, HVAC, electrical, communications, electronic safety and security and utilities sections and Section 024116 "Structure Demolition".

3.4 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.
 - 1. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.
 - 2. Grind down stumps and remove roots, obstructions, and debris below exposed subgrade.
 - 3. Use only hand methods for grubbing within protection zones.
 - 4. Chip removed tree branches and stockpile for use as mulch if needed onsite or dispose offsite.
- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.
 - 1. Place fill material in horizontal layers not exceeding a loose depth of 8 inches and compact each layer to a density equal to adjacent original ground.

3.5 TOPSOIL STRIPPING

- A. Strip topsoil in a manner to prevent intermingling with underlying subsoil or other waste materials.
 - 1. Remove subsoil and nonsoil materials from topsoil, including clay lumps, gravel, and other objects more than 1 inch in diameter; trash, debris, weeds, roots, and other waste materials. Provide screen as required to remove debris and trash as noted for topsoil reuse on site.
- B. Stockpile topsoil away from edge of excavations without intermixing with subsoil. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.
 - 1. Limit height of topsoil stockpiles to 72 inches
 - 2. Do not stockpile topsoil within protection zones.

3.6 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.
- B. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.
 - 1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut along line of existing pavement to remain before removing adjacent existing pavement. Saw-cut faces vertically.
 - 2. Paint cut ends of steel reinforcement in concrete to remain with two coats of antirust coating, following coating manufacturer's written instructions. Keep paint off surfaces that will remain exposed.

3.7 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.
- B. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities. Do not interfere with other Project work

END OF SECTION 311000

SECTION 312000 - EARTH MOVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Preparing subgrades for track events
 - 2. Subbase course and base course for asphalt paving.
 - 3. Excavating and backfilling trenches for utilities

1.3 DEFINITIONS

- A. Backfill: Soil material or controlled low-strength material used to fill an excavation.
 - 1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
 - 2. Final Backfill: Backfill placed over initial backfill to fill a trench.
- B. Base Course: Aggregate layer placed between the subbase course and hot-mix asphalt paving.
- C. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.
- D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.
- E. Drainage Course: Aggregate layer supporting the slab-on-grade that also minimizes upward capillary flow of pore water.
- F. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.
 - 1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Architect. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
 - 2. Bulk Excavation: Excavation more than 10 feet (3 m) in width and more than 30 feet (9 m) in length.

- 3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Architect. Unauthorized excavation, as well as remedial work directed by Architect, shall be without additional compensation.
- G. Fill: Soil materials used to raise existing grades.
- H. Obstruction: Any object or material encountered that is not defined elsewhere in this specification.
- I. Rock:
 - 1. Mass Rock Definition: Where Partially weathered rock may be encountered, these materials will require pre-loosening with a large bulldozer, such as a Caterpillar D8R, or equivalent, equipped with a single tooth ripper, having a drawbar pull rated at not less than 56,000 pounds. Mass Rock shall be defined as any material that cannot be excavated with a single tooth ripper drawn by a crawler tractor having a minimum fly wheel power rated not less than 285 horsepower (Caterpiller D8R or equivalent) and occupying an original volume of at least one cubic yard shall be classified as rock excavation.
 - 2. Trench Rock shall be defined as any material that cannot be excavated with a Caterpiller 315C and occupying an original volume of at least 1 cubic yard or more.
- J. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- K. Subbase Course: Aggregate layer placed between the subgrade and base course for hot-mix asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.
- L. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- M. Utilities: On-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

1.4 SUBMITTALS

- A. Product Data: For each type of the following manufactured products required:
 - 1. Geotextiles.
 - 2. Controlled low-strength material, including design mixture.
 - 3. Import soil sample shall be provided to Testing firm to confirm suitability of import material.
- B. Samples for Verification: For the following products, in sizes indicated below:
 - 1. Geotextile: 12 by 12 inches (300 by 300 mm).
 - 2. Warning Tape: 12 inches (300 mm) long; of each color.

- C. Material Test Reports: For each on-site and borrow soil material proposed for fill and backfill as follows:
 - 1. Classification according to ASTM D 2487.
 - 2. Laboratory compaction curve according to ASTM D 698.
- D. Preexcavation Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including finish surfaces that might be misconstrued as damage caused by earth moving operations. Submit before earth moving begins.

1.5 QUALITY ASSURANCE

- A. Blasting: Not allowed
- B. Burning is not allowed on this property.
- C. Seismic Survey Agency: N/A
- D. Geotechnical Testing Agency Qualifications: Qualified according to ASTM E 329 and ASTM D 3740 for testing indicated.
- E. Preexcavation Conference: Conduct conference at Project site.

1.6 PROJECT CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earth moving operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.
- B. Improvements on Adjoining Property: N/A
- C. Utility Locator Service: Notify utility locator service for area where Project is located before beginning earth moving operations and any utility providers that may not be a member of the PUPS Service.
- D. Do not commence earth moving operations until temporary erosion- and sedimentation-control measures, specified in Division 31 Section "Site Clearing," are in place.
- E. The following practices are prohibited within protection zones:
 - 1. Storage of construction materials, debris, or excavated material.
 - 2. Parking vehicles or equipment.
 - 3. Foot traffic.
 - 4. Erection of sheds or structures.

- 5. Impoundment of water.
- 6. Excavation or other digging unless otherwise indicated.
- 7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.
- F. Do not direct vehicle or equipment exhaust towards protection zones.
- G. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.

1.7 UNIT PRICES

A. Rock Measurement: Volume of rock actually removed, measured in original position, and replacement with suitable material. Rock removal to include but not to exceed the following:

- 1. 24 inches outside of concrete forms other than at footings.
- 2. 12 inches outside of concrete forms at footings.
- 3. 6 inches beneath bottom of concrete slabs on grade.

B. Unsuitable Soil Removal and Replacement: Volume of inplace soil removed due to unsuitable material or moisture, disposed of offsite, and replaced with approved suitable soil material.

C.Unit prices for rock excavation, and unsuitable soil materialto include replacement with approved suitable materials.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations onsite. All import material to be tested to determine suitability of the material for use as structural fill, should be free of debris and organic material, and meet the definition of satisfactory soil.
- B. Satisfactory Soils for Import: Soil Classification Groups GW, GP, GM, SW, SP, SC, and SM according to ASTM D 2487, or a combination of these groups; free of rock or gravel larger than 2 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
- C. Unsatisfactory Soils for Import: Soil Classification Groups GC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D 2487 or a combination of these groups.
 - 1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
 - 2. Note that if the above classified soils are native to the subject site, they may be used as suitable material if maintained at or near optimum moisture and under the supervision of the geotechnical testing firm and their direction.

- D. Aggregate Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand meeting SCDOT Section 305 gradation.
- E. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch (37.5-mm) sieve and not more than 12 percent passing a No. 200 (0.075-mm) sieve.
- F. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; except with 100 percent passing a 1-inch (25-mm) sieve and not more than 8 percent passing a No. 200 (0.075-mm) sieve.
- G. Drainage Course: Narrowly graded mixture of washed crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch (37.5-mm) sieve and 0 to 5 percent passing a No. 8 (2.36-mm) sieve.
- H. Filter Material: Narrowly graded mixture of natural or crushed gravel, or crushed stone and natural sand; ASTM D 448; coarse-aggregate grading Size 67; with 100 percent passing a 1-inch (25-mm) sieve and 0 to 5 percent passing a No. 4 (4.75-mm) sieve.
- I. Sand: ASTM C 33; fine aggregate.
- J. Impervious Fill: Clayey gravel and sand mixture capable of compacting to a dense state.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth moving operations.
- B. Protect and maintain erosion and sedimentation controls during earth moving operations.
- C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

3.2 DEWATERING

- A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
 - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.

2. If subgrades capture and hold water, contractor to take necessary action to drain or pump water from standing on subgrade.

3.3 EXPLOSIVES

A. Explosives: Do not use explosives.

3.4 EXCAVATION, GENERAL

Classified Excavation: Excavation is classified and includes excavation to required subgrade elevations. Excavation will be classified as earth excavation or rock excavation as follows:

1. Earth excavation includes excavation of pavements and other obstructions visible on surface; underground structures, utilities, and other items indicated to be demolished and removed; together with soil and other materials encountered that are not classified as rock or unauthorized excavation.

Intermittent drilling or ripping to increase production and not necessary to permit excavation of material encountered will be classified as earth excavation.

The width of trench excavation for pipe shall be the equal to the pipe diameter plus 16 inches.

2. Rock excavation includes removal and disposal of rock material and obstructions encountered that cannot be removed by the following heavy-duty rock excavating equipment without systematic drilling, blasting, or ripping.

Rock material includes boulders 1 cu. yd. or more in volume and rock in beds, ledges, unstratified masses, and conglomerate deposits.

- 3. Rock Excavation and Ripping Criteria
 - a. Massive Rock Excavation: Where Partially weathered rock may be encountered, these materials will require pre-loosening with a large bulldozer, such as a Caterpillar D8R, or equivalent, equipped with a single tooth ripper, having a drawbar pull rated at not less than 56,000 pounds. Any material that cannot be excavated with a single tooth ripper drawn by a crawler tractor having a minimum fly wheel power rated not less than 285 horsepower (Caterpiller D8R or equivalent) and occupying an original volume of at least one cubic yard shall be classified as rock excavation.
 - b. Trench Excavation: Any material that cannot be excavated with a caterpiller 315C and occupying an original volume of at least 1 cubic yard or more.
- 4. Rock excavation will be paid by unit prices included in the Contract Documents.
- 5. Do not excavate rock until it has been classified and cross-sectioned/measured by Testing Firm.

3.5 EXCAVATION FOR WALKS AND PAVEMENTS

A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

3.6 EXCAVATION FOR UTILITY TRENCHES

- A. Excavate trenches to indicated gradients, lines, depths, and elevations.
 - 1. Beyond building perimeter, excavate trenches to allow installation of top of pipe below frost line.
- B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches (300 mm) higher than top of pipe or conduit unless otherwise indicated.
 - 1. Clearance: 12 inches (300 mm) each side of pipe or conduit.
- C. Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade. See Trench section for direction on bedding course.
- D. Trenches in Tree- and Plant-Protection Zones:
 - 1. Hand-excavate to indicated lines, cross sections, elevations, and subgrades. Use narrowtine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.
 - 2. Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities.
 - 3. Cut and protect roots according to requirements in Division 01 Section "Temporary Tree and Plant Protection."

3.7 SUBGRADE INSPECTION and APPROVAL

- A. Notify Testing firm when excavations have reached required subgrade.
 - 1. If geotechnical engineer determines that unsatisfactory soil is present, areas should be excavated and backfilled in accordance with Structural fill as directed. The evaluation should include proofrolling the subgrade with an approved piece of equipment (such as a loaded dump truck, having an axle weight of at least 10 tons) to identify soft, loose and yielding areas. Based on the recommendations of the engineer, unsuitable materials encountered during the proofrolling operations should be repaired in-place by additional densification, or be removed and replaced with engineered fill that is placed and compacted.
- B. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Architect, without additional compensation.

3.8 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.9 BACKFILL

- A. Place and compact backfill in excavations promptly, but not before completing the following:
 - 1. Construction below finish grade including, where applicable, subdrainage, dampproofing, waterproofing, and perimeter insulation.
 - 2. Surveying locations of underground utilities for Record Documents.
 - 3. Testing and inspecting underground utilities.
 - 4. Removing concrete formwork.
 - 5. Removing trash and debris.
 - 6. Removing temporary shoring and bracing, and sheeting.
 - 7. Installing permanent or temporary horizontal bracing on horizontally supported walls.
- B. Place backfill on subgrades free of mud, frost, snow, or ice.

3.10 UTILITY TRENCH BACKFILL

- A. Place backfill on subgrades free of mud, frost, snow, or ice.
- B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.
- C. Trenches under Footings: Backfill trenches excavated under footings and within 18 inches (450 mm) of bottom of footings with satisfactory soil; fill with concrete to elevation of bottom of footings. Concrete is specified in Division 03 Section "Cast-in-Place Concrete."
- D. Backfill voids with satisfactory soil while removing shoring and bracing.
- E. Place and compact initial backfill of satisfactory soil, free of particles larger than 1 inch (25 mm) in any dimension, to a height of 12 inches (300 mm) over the pipe or conduit.
 - 1. Carefully compact initial backfill under pipe haunches and compact evenly up on both sides and along the full length of piping or conduit to avoid damage or displacement of piping or conduit. Coordinate backfilling with utilities testing.
- F. Place and compact final backfill of satisfactory soil to final subgrade elevation.
- G. Controlled Low-Strength Material: Place final backfill of controlled low-strength material to final subgrade elevation if indicated.

H. Install warning tape directly above utilities, 12 inches (300 mm) below finished grade, except 6 inches (150 mm) below subgrade under pavements and slabs.

3.11 SOIL FILL

- A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.
- B. Place and compact fill material in layers to required elevations as follows:
 - 1. Under grass and planted areas, use satisfactory soil material.
 - 2. Under walks and pavements, use satisfactory soil material.
 - 3. Under steps and ramps, use engineered fill.
 - 4. Under building slabs, use engineered fill or satisfactory soil material.
 - 5. Under footings and foundations, use engineered fill or satisfactory soil material.
- C. Place soil fill on subgrades free of mud, frost, snow, or ice.

3.12 SOIL MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 3 percent of optimum moisture content.
 - 1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
 - 2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 3 percent and is too wet to compact to specified dry unit weight.

3.13 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 8 inches (200 mm) in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches (100 mm) in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill soil materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure, and 10 feet beyond the proposed structure perimeters and pavement areas.
- C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D 698:
 - 1. Fill placed in areas that will support pavements should be compacted to a minimum of 98 percent of the maximum dry density.

3.14 GRADING

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
 - 1. Provide a smooth transition between adjacent existing grades and new grades.
 - 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:
 - 1. Turf or Unpaved Areas: Plus or minus 1 inch (25 mm).
 - 2. Walks: Plus or minus 1/4 inch.

3.15 BASE COURSES UNDER PAVEMENTS AND WALKS

A. See Section 32 11 23 for Aggregate Base Course direction.

3.16 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a qualified testing firm to perform the following special inspections:
 - 1. Determine prior to placement of fill that site has been prepared in compliance with requirements.
 - 2. Determine that fill material and maximum lift thickness comply with requirements.
 - 3. Determine that in-place density of compacted fill complies with requirements.
- B. Testing Agency: Owner will engage a qualified geotechnical engineering testing agency to perform tests and inspections.
- C. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.
- D. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

3.17 PROTECTION

A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.

- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
 - 1. Scarify or remove and replace soil material to depth as directed by Architect; reshape and recompact.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
 - 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.18 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

END OF SECTION 312000

SECTION 32 11 23 – AGGREGATE BASE COURSE

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Aggregate base course.
- 1.2 RELATED SECTIONS
 - A. Section 32 12 16 Asphalt Paving

1.3 REFERENCES

- A. ANSI/ASTM D1557 Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10 lb (4.54 Kg) Rammer and 18 inch (457 mm) Drop.
- B. South Carolina Department of Transportation Standard Specifications for Highway Construction, latest edition.

1.4 SUBMITTALS

A. Submit Documentation that Aggregate Base Course meets SCDOT Standard 305, latest specification.

PART 2 PRODUCTS

2.1 MATERIALS

A. Aggregate Base Course: Materials comply with SCDOT Specifications Section 305, Graded Aggregate Base Course. The composition mixture of course aggregate and binder material shall meet the grading requirements specified for Macadam base course.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify subgrade has been inspected, proofrolled, and elevations are correct, and dry.

3.2 AGGREGATE PLACEMENT

- A. Spread aggregate over prepared subgrade to a total compacted thickness as shown on plans.
- B. Place aggregate in maximum 8-inch layers and roller compact.
- C. Level and contour surfaces to elevations and gradients indicated.
- D. Add small quantities of fine aggregate to course aggregate as appropriate to assist compaction.

AGGREGATE BASE COURSE

- E. Add water to assist compaction. If excess water is apparent, remove aggregate and aerate to reduce moisture content.
- F. Use mechanical tamping equipment in areas inaccessible to compaction equipment.

3.3 TOLERANCES

- A. Flatness: Maximum variation of 1/4 inch measured with 10-foot straight edge.
- B. Scheduled Compacted Thickness: Within 1/4 inch.
- C. Variation from True Elevation: Within 1/2 inch.
- D. Compaction shall be 95 percent of maximum density as required by AASHTO T-180 or SCT-140 (modified proctor).

3.4 FIELD QUALITY CONTROL

- A. Compaction testing shall be performed at a minimum frequency of one test per track event. Additionally, thickness measurements should be performed at a minimum of one measurement per event. One bulk sample should be obtained for gradation testing, per ASTM C136.
- B. If tests indicate Work does not meet specified requirements, remove Work, replace and retest.

END OF SECTION

32 18 23 TRACK AND FIELD SURFACE

PART 1 GENERAL

- 1.1 DESCRIPTION of Work
 - A. Furnish and install Maxflex BL 13mm system or approved equal Running Track resilient surfacing on asphalt pavement and base.
 - B. Provide a mixture of uniformly graded rubber granules and rubber fibers, bound together with formulated styrene butadiene resin polymer, providing a durable, resilient surface for the running track and designated field event areas. No asphalt material shall be incorporated into the track surface system.
 - C. The following surfaces shall receive the surface system:
 - (1) Runways for long jump; triple jump; and pole vault
 - (2) High jump area.
 - D. Provide line markings per the latest standards of the National Federation of State High Schools Association.
 - E. The contractor shall install Pole Vault Planting Box and Takeoff Boards for new long jump/triple jump runways that meets current NFHS standards.

1.2 RELATED SECTIONS

A. References

- 1. National Asphalt Pavement Association (NAPA)
- 2. USA Track & Field (USATF)
- 3. National Federation of State High School Associations (NFHS)
- 4. National Interscholastic Athletic Administrators Association (NIAAA)
- 5. International Association of Athletics Federation (IAAF)
- 6. American Sports Builders Association (ASBA)

1.3 QUALITY ASSURANCE

- A. Asphalt surface shall comply with the guidelines of the ASBA and NAPA for surface planarity and density. It is recommended that the Track Contractor is responsible for track base, concrete flush curb, asphalt paving, and track surfacing in order to meet necessary requirements.
- B. All liquid materials shall be from a single source and manufactured for the purpose of resilient track construction.
- C. The installer shall be an Authorized Applicator of the specified surface system and a member of the ASBA. The surfacing installer shall have at least 5 years experience in constructing running track facilities. Any proposed installer shall provide the location of at least 5 constructed facilities, contact names, and contact numbers for verification of their ability to meet the experience requirements if required by owner.
- D. Do not install when rain is imminent or when ambient temperatures are below 50 degrees F.

1.4 SUBMITTALS

- A. Product data in the form of Manufacturer's specifications, technical data, and installation instructions.
- B. Representative sample of the system to be installed with appropriate labeling for identification.
- C. Current Authorized Applicator certificate from the surface system manufacturer.
- D. A complete list of materials intended to be used in the construction of the running track system. All liquid quantities will be <u>prior</u> to dilution.
- E. Reference list from the installer of at least 5 projects of similar scope done the past five years.
- F. Product substitution: If other than the product specified, the contractor shall submit at least 7 days prior to the bid date a complete type written list of proposed substitutions with sufficient data, drawings, samples and literature to demonstrate that the proposed substitution is of equal quality and utility to that originally specified. Information must include IAAF test information for the system to be installed.

1.5 MATERIAL HANDLING AND STORAGE

- A. Store material in accordance with manufacturer's specifications and MSDS.
- B. Deliver products to the site in original, unopened containers with labels attached.
- C. All surfacing materials shall be non-flammable.

1.6 WARRANTY

A. Warrant surface against defects in workmanship and materials for ONE YEAR from date of Substantial Completion. Repair or replace defective surface. Excluded from this warranty are defects caused by acts of God, improper maintenance, and abuse. The Owner is required to maintain the surface in accordance with the maintenance instructions provided with the warranty.

1.7 INSTALLER QUALIFICATIONS

- A. Installer shall be an authorized applicator of the specified system.
- B. Installer shall be a builder member of the ASBA.

1.8 MANUFACTURER QUALIFICATION

- A. Material supplier shall certify that the materials provided are manufactured specifically for construction and surfacing of running tracks.
- B. System manufacturer shall be a US owned company that has been continuously engaged in the business of track surfacing materials for at least 10 years.
- C. Manufacturer shall be a member of the ASBA.
- D. System manufacturer shall have a designated representative available for site inspection.

PART 2 PRODUCT

2.1

- A. Basis of Design Manufacturer Precision Athletics, Inc., Richmond VA, 1-434-953-9603 or Approved Equal. Design basis is MAXFLEX BL system.
- B. Product substitution: If other than the product specified, the contractor shall submit at least 7 days prior to the bid date a complete type written list of proposed substitutions with sufficient data, drawings, samples and literature to demonstrate that the proposed substitution is of equal quality and utility to that originally specified. Information must include IAAF test information for the system to be installed.

2.2 MATERIALS

A. FORTIFIED SBR LATEX BINDER A - carboxilated styrene butadiene latex polymer (45/55 Styrene Butadiene Ratio) containing a minimum of 50% resin solids content. Latex shall be manufactured by Mallard Creek Polymers, Inc. (Product Code #4125) or an approved equal. Latex shall have the following properties when tested in accordance with ASTM D412. Films shall be 15 ml wet film at 24 hour air dry; 2 minutes at 95 degrees Centigrade.

1.	Tensile (average in psi)	179
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- 2. Elongation (%) 1375
- B. FORTIFIED SBR LATEX BINDER B carboxilated styrene butadiene latex polymer (65/35 Styrene Butadiene Ratio) containing a minimum of 50% resin solids content. Latex shall be manufactured by Mallard Creek Polymers, Inc. (Product Code #4170) or an approved equal. Latex shall have the following properties when tested in accordance with ASTM D412. Films shall be 15 ml wet film at 24-hour air dry; 2 minutes at 95 degrees Centigrade.

1.	Tensile (average in psi)	1786
2.	Elongation (%)	497

- C. BASE LAYER RUBBER GRANULES Black SBR rubber granules ranging in size from 3 mm to 7 mm.
- D. SURFACE LAYER RUBBER PARTICLES Black SBR rubber buffings equal to #58438 rubber as manufactured by Sparton Enterprises, Inc. Granules are not acceptable.
- E. LINE MARKING PAINT Acrylic latex line marking paint approved by the manufacturer of the track surface.
- F. The following materials shall be delivered and installed (based upon an area of square yards). All materials shall be delivered to the site, checked and approved by the owner prior to the commencement of installation.
 - a) LATEX BINDER: 30 ea. 55-gallon drums #4125 SBR Latex Resin 30 ea. 55-gallon drums #4170 SBR Latex Resin
 - b) BLACK SBR RUBBER: 50,350# SBR BLACK RUBBER PARTICULATE

All latex binder quantities are prior to dilution with water. Contractor shall provide containers and random latex samples for testing. All unused materials shall become the property of the owner.

PART 3 EXECUTION

3.1 WEATHER LIMITATIONS

- A. Ambient and surface temperatures must be 50°F and rising.
- B. Installation should not be conducted during rainfall or when rainfall is imminent.
- C. Do not apply when surface temperature is in excess of 140°F.

3.2 SURFACE PREPARATION

- A. Strip area and compact subgrade.
- B. Install new Aggregate Base Course and pave track as noted below.

B. Pave track surface with Hot Mix Asphalt (HMA) as directed. The HMA shall be manufactured from a SCDOT certified HMA manufacturing facility. Work consists of two courses of HMA constructed on a properly prepared base course. The low-volume (aka athletic use) asphalt concrete consists of a mixture of dense (aka well) graded aggregate and specified type and grade of asphalt binder. The manufacturing facility shall be capable of producing HMA in accordance with the following requirements and all applicable local agency specifications on an ongoing and consistent basis.

Ensuring uniform material is produced and selecting the vendor for these asphalt projects will require timely submittal of documents and qualifications to the satisfaction of the Owner. Contractor / material supplier shall demonstrate the existence of the following documents:

Calibrated equipment and qualified personnel must be accessible at all times during the construction of the HMA. The Contractor installing the HMA shall provide the necessary equipment, materials, and labor to complete the job acceptable to the Owner and in accordance with applicable contract documents. Variations in the size and amount of equipment will depend on the size of the area being paved.

It is imperative that all documents list a "Person-in-Charge" who is responsible for the oversight of the previously listed activities. This individual will be the point of contact for the Owner and shall work with the Owner to ensure timely project completion and specification compliance. This individual shall be knowledgeable in all aspects of asphalt design, production, and This individual shall be knowledgeable in all aspects of asphalt design, production, and installation and shall be an employee of the Contractor installing the asphalt, even if the HMA is being produced and supplied by a separate vendor.

This individual shall be knowledgeable in all aspects of asphalt mix design, production, and installation and shall be an employee of the company holding the contract with the Owner, even if the HMA is being produced and supplied by a separate vendor. This person shall have authority to take corrective actions needed to make the athletic asphalt fit for use.

Definitions

1. Surface Course – The low volume surface / wearing course shall be installed uniformly, to all finished lines and grades, smooth, durable, impervious thus protecting lower layers, and stable. Workmanship of the finished surface course shall be of the highest industry standards (NAPA, AI, ASBA, and NHI references) and applicable to sports surfaces prior to acceptance by the Owner. The surface course shall be built with a fine-graded, $\frac{1}{2}$ " maximum aggregate particle size (Nominal Maximum Aggregate Size of $\frac{3}{8}$ ") or smaller. Surface course shall be installed to a minimum average $1-\frac{1}{2}$ " compacted thickness; ensure that no thickness of less than $1-\frac{1}{4}$ " compacted thickness is placed.

2. Leveling Intermediate Course – The course that requires placement of approximately 2" of HMA SCDOT Type C Intermediate Course to 'true up' the area prior to placement of the surface course. This course has a Maximum Aggregate Size (MAS) no greater than that of the surface course.

3. Tacking / Priming – The process of applying one coat of emulsified asphalt to all horizontal and vertical surfaces of either an existing pavement for an overlay or between lifts while building an improved or new structure (tacking), or upon the aggregate base (priming).

Materials

• Tack Coat: AASHTO M140 or M208 (Reference the Asphalt Institute MS- 19 for Handling, Storage and Application criteria: typically 0.05 gal / sy to 0.15 gal / sy (0.02 gal / sy to 0.05 gal / sy residual AC) depending on the existing surface condition; see Surface Preparation section and current AI and NAPA publications).

Tack Coat: SS-1, SS-1h, CSS-1 or CSS-1h diluted with an equal amount of water, or agency acceptable product.

• Hot Mix Asphalt (Low Volume):

Aggregates, mineral filler, and asphalt binder shall meet or exceed the requirements of local specifications for asphalt pavements placed under this contract for qualities and types. The coarse aggregate shall be sound, angular crushed stone, crushed gravel, or crushed air-cooled blast furnace slag (not steel). The fine aggregate shall be well graded, moderately sharp to sharp (angular) sands. No aggregates known to cause rust spots or pop-outs (steel slag, iron pyrite, and / or dust balls) are allowed in the asphalt. No recycled concrete is allowed in any of the asphalt mixtures.

All HMA mix designs shall be performed in accordance with the Asphalt Institute Manual Series #2 (MS-2), current edition. The HMA mix designs developed shall meet the requirements of one of the following for compactive effort in the laboratory:

- 1. Marshall, 50-Blow,
- 2. Superpave, 50-Gyration, or
- 3. Hveem, Low Volume Mix.
- 4. Alternate *Low Volume* Asphalt Mix Designs may be allowed with the Engineers approval prior to time of bidding.

• HMA Mix Designs shall be performed by qualified personnel with proven past experience and successes in the mix design and quality control of asphalt production. Resumes of the signing "individual-in-charge" may be required by the Owner and shall be supplied if requested. The design shall meet the following requirements and be less than 24-months old. However the mix design method

used shall be the Contractors option, as stated previously, based on various methods which currently exist around the nation. A completed design shall be signed by a professional engineer and require submittal of documentation as detailed within this specification. This is required by the Owner in order for the producer to demonstrate knowledge of asphalt mix design and production criterion needed to supply athletic asphalt.

• Track Submittal documents shall include the Contractors proposed Asphalt Mixture Design sheets. Designs will be for HMA to be placed for each of the track uses anticipated on the project; patching, leveling, and / or surface course. Submittals shall be submitted within 10 days prior to any work being performed; asphalt mix design cover sheet which summarizes all materials and optimum asphalt content is required.

Equipment

- Tack / Prime Coat Distributor Truck must have an insulated tank, heating system, and a calibrated distributor capable of maintaining a uniform application of emulsified asphalt under pressure throughout the area to be paved. This requires a pump in good working order, full circulating spray bars, and free flowing nozzles. Small, isolated areas may be tacked with a wand.
- Trucks shall have smooth, clean and tight metal beds that do not have mixture sticking to the truck bed and from which the entire quantity of HMA can be discharged smoothly into the spreading equipment. Trucks shall have a tarp and insulation as needed to protect the asphalt mixture from wind, rain and cold temperatures. Trucks for hauling asphalt mixture shall be in good, safe working condition.

• Paving Equipment must be capable of placing, spreading and finishing courses of HMA to the specified thicknesses. HMA shall be free of marks, segregation and be placed to the required uniform elevation with a smooth texture not showing tearing, shoving, or gouging. Auger extensions are required while pavers are extended beyond the basic screed width. Paving Equipment shall be self-propelled and capable of maintaining the line and grade shown on the plans with suitable electronic equipment. The screed shall be straight and true with no bow and utilizing a vibratory screed. Hand work shall be minimized to ensure the best possible finished surface. It is recommended that paving equipment be equipped with sonar pods or no contact skis for sports asphalt construction. Additionally, it should be equipped with automatic slope control to maintain required tolerances. Finally, paving equipment should have fully functional screed heaters and joint preheaters.

• Rollers shall conform to the manufacturer's specifications for all ballasting. At least one vibratory roller shall be required for each project with two rollers required as a minimum. (Three rollers shall be required when tonnage is greater than 300 tons / day.) Rollers shall be of good condition and capable of compacting the HMA to the minimum in-place density required by this specification.

Surface Preparation

- Repair pavement failures and perform crack repair according to specification requirements prior to HMA installation.
- Cold-milling and/or grinding may be necessary to ensure that the asphalt edges at concrete abutments such as approaches, sidewalks, curbing, and drainage basins have smooth transitions.

- After site review, detail whether wedge milling is necessary to assure positive drainage and transition. Install leveling course, if required, on the project per the site details and quantities shown on the plan sheets.
- Existing surfaces to receive HMA must be clean prior to the installation of any portion of the work. Clean the surface on which the asphalt concrete is to be placed, and keep it free of accumulations of materials that would contaminate the mixture, prevent bonding, or interfere with spreading operations. Methods used may include but not be limited to the use of a sweeper that can wet and vacuum the area free of dirt and debris, clay, and dust, or any other foreign material.
- Any oil or grease spots shall be scraped and treated to prevent bleeding through the tack coat. Bad oil spills may require removal with a wire brush or other suitable tool. Maintain clean pavements prior to applying emulsified tack coat. When approved sub- grade or pavement courses previously constructed under the Contract become loosened, rutted, or otherwise defective, the Contractor must correct the deficiency according to the contract item or items involved before the spreading of a subsequent pavement course.
- Install tack coat during appropriate weather conditions and protect the tack coat from traffic so as not to wear and track. Allow the tack coat to 'break', i.e. turn from brown to black prior to installation of the HMA.
- Perform work in appropriate weather conditions that are dry with no rain, snow, or other forms of precipitation falling or imminent (anticipated during installation of the HMA).

Pavement Placement

- Install HMA which shall generally arrive on the project between 270 300° Fahrenheit (see producer recommendation) asphalt in accordance with above weather conditions and with a temperature of 50° F. and rising for all asphalt lifts.
- Establish an acceptable rolling pattern with the assistance of a density technician on the first day of construction. Record temperatures, equipment, rolling pattern, and in-place density results throughout the project.
- Surface course longitudinal joints shall be smooth and true; no deviation from level and true as required of the mat will be allowed. Detail and submit to the Owner a paving plan on the site plan sheet prior to placement of asphalt.
- The entire athletic surface course shall be paved on the same day. The timing and process should be discussed with and approved by the Owner before proceeding with the work. If a cold seam will occur it must be agreed to with the Owner in advance such as: occur near or at a planned saw and seal joint or under the fence line.
- Rolling shall start as soon as the HMA can be compacted without displacement. Rolling shall continue until the HMA is thoroughly compacted and all roller marks have disappeared. Compact the HMA to a minimum in-place density of 94.0% of the Theoretical Maximum Specific Gravity, Gmm.
- Smoothness shall meet the requirements of no greater than ¹/₄" in 10 ft. for base and leveling courses and ¹/₈" in 10 ft. for surface course.

- Thickness of the overall mat shall be within ¹/₄" (surface course, no minus) of the specified plan thickness at all locations. However, the yield for the day and for the entire site shall meet calculated theoretical based on 94% of Gmm supplied from the Contractors mix design and daily test values.
- Paving Joints
 - Minimize construction, longitudinal, and transverse joints left open for an extended period of time.
 - Construct longitudinal joints by paving in a hot fashion with a temperature of not less than 220^oF to ensure maximum performance.
 - Compact all joints to provide for a neat, uniform and tightly bonded joint that will meet both surface tolerances and density requirements.
 - Cut straight and true (vertical) construction or transverse joints if the material has cooled to less than 220^oF prior to the placement of the next pass to ensure the best performing joint possible.
 - Off-set joints a minimum of 6" between lifts of asphalt.
 - Protect the HMA until such time that coating can be placed upon the properly compacted asphalt, particularly during other construction activities between asphalt installation and athletic surface installation.
 - If excessive segregation is occurring during placement operations, the Contractor will investigate the cause(s) and make appropriate changes to the satisfaction of the Owner.
 - B. New asphalt shall be allowed to cure for a minimum of 14 days prior to the application of any surfacing materials.
 - C. The surface must be thoroughly cleaned of all loose dirt and debris.
 - D. Prior to the application of resilient surface materials, the entire surface shall be flooded and checked for depressions or irregularities in the asphalt. Any puddle area covering a nickel shall be marked and repaired with Court Patch Binder, according to California Products Specification 10.14. After patching, the asphalt surface shall not vary more than 1/4" in 10 feet, measured in any direction. Any depressions 1/4" or greater, shall be leveled using patch materials indicated. Slopes shall meet the guidelines of the ASBA and NFHS.

3.3 SURFACE INSTALLATION

- A. Priming: Spray prime all areas to receive the track surface with a solution of Binder A diluted with an equal part of potable water. Apply at a rate of .05 gallons per square yard of surface area.
- B. <u>Rubber/Latex Application</u>: Construct the track surface by applying successive layers of rubber granulate using a metering machine (areas inaccessible to the metering machinery shall be spread with a lute). Saturate each layer of rubber with latex binder at a rate of approximately .07 gallons per pound of dry rubber. The final application of latex binder shall contain an ultraviolet stabilized black oxide pigment.
 - 1. Apply the rubber in the following layers:

a)	Base Layer One (5mm/7mm rubber)	2.6 lbs. per square yard
b)	Base Layer Two and Three (3mm/6mm rubber)	2.7 lbs. per square yard
c)	Surface Layer Four (1/3mm mix buffings)	2.6 lbs. per square yard
d)	Surface Layer Five (SBR buffings)	1.6 lbs. per square yard

- 2. Saturation is to be done by using a high-pressure, multi-tip spray bar and not a hand wand method. Each saturation with latex solution shall be allowed to dry. Each layer shall be thoroughly bonded prior to proceeding with the installation of the next layer. The finished system shall be resistant to scuffing and shredding of granules.
- C. Physical Properties
 - 1. Thickness: 1/2" minimum
 - 2. Color: Black
 - 3. Spikes: Yes, 3/16" maximum.
 - 4. The completed rubber mat shall be dense and thoroughly bonded

3.4 MARKING AND MEASUREMENTS

- A. Wait 48 hours after surface completion before applying line marking. The installer shall:
 - a) Locate and establish all radius points.
 - b) Establish and set all necessary control points.
 - c) Layout all lines and markings to tolerances set forth by ASBA and governing body requirements.
 - d) Provide all computations and measurements in organized form.
 - e) Establish all locations on the curves using a Transit or Theodolite capable of reading direct to 20 seconds.
 - f) Identify all markings, where appropriate, by painting the identification directly onto the track surface in 4" letters just below or in front of each mark in the right hand portion of the lane.
 - g) Paint all of the large, 3' high, lane numbers in two (2) colors, utilizing shadowed backgrounds.
 - h) All lines shall receive sufficient paint to assure complete opacity and uniformity of color.
 - i) Paints shall be used directly from original containers and shall be thinned only when hot temperatures dictate thinning for smooth applications.
 - j) Amount of paint used shall be as recommended by the manufacturer.
 - k) The paint used shall be a 100% acrylic latex line paint, Plexicolor Line paint, made especially for the painting of lines on sports surfaces
 - 1) All measurements shall be made by competent, experienced and fully qualified personnel.

m) Upon completion of the track markings, a licensed professional engineer or registered land surveyor shall furnish an acceptable letter of or certificate of, accuracy to the Owner attesting to the accuracy of the track markings and measurements. This will also include copies of the computations, calculations and drawings that were used to obtain this accuracy. The Engineer or Surveyor should affix their stamp to the drawing and the certificate.

n) The markings shall include all events and marks required or recommended by the National Federation of State High Schools.

3.5 **PROTECTION**

- A. During construction the owner is responsible for limiting access of non-construction personnel to the site.
- B. The owner shall coordinate any irrigation of fields with the installation contractor.
- C. The installer shall protect curbs, fences and other structures from overspray.

D. The installer must provide a track protection plan for crossing the existing track surface. If any portion of the existing track is damaged at subject crossing, it shall be prepared at no expense to the Owner

3.6 CLEAN UP

- A. Remove all containers, surplus and debris and dispose of in accordance with local, state and Federal regulation.
- B. Remove all spills and overruns.
- C. Leave site in a clean and orderly condition.

END OF SECTION

SECTION 32 92 00 -GRASSING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Sodding
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 31 Section "Site Clearing" for protection of existing trees and planting, topsoil stripping and stockpiling, and site clearing.
 - 2. Division 31 Section "Earthwork" for excavation, filling, rough grading, and subsurface aggregate drainage and drainage backfill.

1.3 SUBMITTALS

- A. Product certificates signed by manufacturers certifying that their products comply with specified requirements.
 - 1. Manufacturer's certified analysis for standard products.
- B. Submit soil analysis results indicating recommended lime and fertilizer additive amounts of disturbed area to be grassed.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced Installer who has completed landscaping work similar in material, design, and extent to that indicated for this Project and with a record of successful landscape establishment.
 - 1. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on the Project site during times that landscaping is in progress.

- B. Topsoil Analysis: Furnish a soil analysis made by a qualified independent soil-testing agency stating percentages of organic matter, inorganic matter (silt, clay, and sand), deleterious material, pH, and mineral and plant-nutrient content of topsoil.
 - 1. Report suitability of topsoil for growth of applicable planting material. State recommended quantities of nitrogen, phosphorus, and potash nutrients and any limestone, aluminum sulfate, or other soil amendments to be added to produce a satisfactory topsoil.
- C. The Contractor shall fully comply with all provisions of the Contract Documents including, but not limited to, providing and installing such entities as the products, materials, equipment, components, or systems that were proposed at the time bids were received. Except for extenuating circumstances as determined by the Architect, notification of not being able to meet any of the provisions of the Contract Documents or communicating conflicts in the Contract Documents to the Architect will not be considered after receipt of bids; and the Contractor shall fully comply with the Contract Documents at no increase in Contract Sum or Contract Time.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Sod: Harvest, deliver, store, and handle sod according to requirements in "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" sections in TPI's "Guideline Specifications to Turfgrass Sodding." Deliver sod within 24 hours of harvesting and in time for planting promptly. Protect sod from breakage and drying.

1.6 PROJECT CONDITIONS

- A. Utilities: Determine location of above grade and underground utilities and perform work in a manner which will avoid damage. Hand excavate, as required. Maintain grade stakes until removal is mutually agreed upon by parties concerned.
- B. Excavation: When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions, or obstructions, notify Architect before planting.

1.7 COORDINATION AND SCHEDULING

A. Irrigation Coordination: prior to ordering sod for installation, verify Owner has made necessary irrigation rework adjustments and irrigation system is ready for operation.

1.8 WARRANTY

- A. General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
- B. Special Warranty: Warrant the sod materials for a period of 3 months after date of Substantial Completion, against defects including death and unsatisfactory growth, except for defects resulting from lack of adequate maintenance, neglect, or abuse by Owner, abnormal weather conditions unusual for warranty period, or incidents that are beyond Contractor's control.

1. Grass Sod

1.9 LAWN MAINTENANCE

- A. Watering: Provide and maintain lawn-watering equipment to convey water from sources and to keep lawns uniformly moist to a depth of 4 inches.
 - 1. Water fresh sod as required for the first month for initial grown in.

PART 2 - PRODUCTS

2.1 TURFGRASS SOD

A. Turfgrass Sod: Tifway 419, complying with "Specifications for Turfgrass Sod Materials" in TPI's "Guideline Specifications to Turfgrass Sodding." Furnish viable sod of uniform density, color, and texture that is strongly rooted and capable of vigorous growth and development when planted.

2.2 TOPSOIL

- A. Topsoil: ASTM D 5268, pH range of 5.5 to 7, 4 percent organic material minimum, free of stones 1 inch or larger in any dimension, and other extraneous materials harmful to plant growth.
 - 1. Topsoil Source: Reuse surface topsoil stripped from the site if adequate for specified coverage of 2" over all disturbed areas. Supplement with import as required to spread 2" clean topsoil over complete disturbed areas. Verify suitability of surface soil to produce topsoil meeting requirements and amend when necessary. Clean topsoil of roots, plants, sods, stones, clay lumps, and other extraneous materials harmful to plant growth.

2.3 SOIL AMENDMENTS

A. Lime: ASTM C 602, Class T, agricultural limestone containing a minimum 80 percent calcium carbonate equivalent, with a minimum 99 percent passing a No. 8 sieve and a minimum 75 percent passing a No. 60 sieve.

PART 3 - EXECUTION

3.1 EXAMINATION

GRASSING

A. Examine areas to receive sod for compliance with requirements and for conditions affecting performance of work of this Section. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Before planting, clean topsoil of roots, plants, sods, stones, clay lumps, and other extraneous materials harmful to plant growth.
- B. Loosen subgrade to a minimum depth of 4 inches. Remove stones in any dimension and sticks, roots, rubbish, and other extraneous materials.
- C. Grade sod areas to a smooth, even surface with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades. Limit fine grading to areas that can be planted in the immediate future. Remove trash, debris, stones in any dimension, and other objects that may interfere with planting or maintenance operations.
- F. Moisten prepared lawn areas before planting when soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.

3.3 SODDING

- A. Lay sod within 24 hours of harvesting. Do not lay sod if dormant or if ground is frozen or muddy.
- B. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in adjacent courses. Avoid damage to soil or sod during installation. Tamp and roll lightly to ensure contact with soil, eliminate air pockets, and form a smooth surface. Work sifted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass.
- C. Saturate sod with fine water spray within two hours of planting. During first week after planting, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1-1/2 inches below sod.

3.4 CLEANUP AND PROTECTION

- A. During landscaping, keep pavements clean and work area in an orderly condition.
- B. Protect landscaping from damage due to landscape operations, operations by other contractors and trades, and trespassers. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged landscape work as directed.

3.5 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Disposal: Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of it off the Owner's property.

END OF SECTION 32 92 00

SECTION 334100 - STORM DRAINAGE PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Pipe and fittings.
 - 2. Manholes.
 - 3. Stormwater structures.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings:
 - 1. Manholes: Include plans, elevations, sections, details, frames, and covers.
 - 2. Stormwater Structures: Include plans, elevations, sections, details, frames, and grates.
- C. Field quality-control reports.
- D. Record Drawings: The Contractor shall furnish to the Engineer Record Drawings of the storm drainage system. This information shall be presented electronically using the electronic file of the Grading and Utilities Plan Sheets. <u>Marked-up Construction Document drawings are not acceptable</u>. Record Drawings shall include, but not limited to, the following:
 - 1. Surveyed locations and invert elevations, rims, throats and/or grate elevations of structures. Also included shall be as-built topography of any detention ponds and outlet structures.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Protect pipe, pipe fittings, and seals from dirt and damage.
- B. Handle stormwater structures according to manufacturer's written rigging instructions.

1.5 PROJECT CONDITIONS

- A. Interruption of Existing Storm Drainage Service: Do not interrupt service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary service according to requirements indicated:
 - 1. Notify Owner no fewer than two days in advance of proposed interruption of service.

PART 2 - PRODUCTS

2.1 MATERIALS:

- A. Material as specified at Contractor option unless indicated otherwise.
- B. Corrugated High Density Polyethylene Pipe (HDPE)
 - 1. Pipe sizes 4" 10" HDPE: **ADS N-12 ST IB** pipe (per ASTM F2648) shall have a smooth interior and corrugations.

Pipe shall be joined using a bell & spigot joint meeting ASTM F2648. The joint shall be soil-tight and gaskets, when applicable, shall meet the requirements of ASTM F477. Gaskets shall be installed by the pipe manufacturer and covered with a removable wrap to ensure the gasket is free from debris. A joint lubricant supplied by the manufacturer shall be used on the gasket and bell during assembly.

Fittings shall conform to ASTM F 2306. Bell and spigot connections shall utilize a spun-on or welded bell and valley or saddle gasket meeting the soil-tight joint performance requirements of ASTM F 2306.

Material for pipe production shall be an engineered compound of virgin and recycled high density polyethylene conforming with the minimum requirements of cell classification 424420C (ESCR Test Condition B) for 4- through 10-inch (100 to 250 mm) diameters, , as defined and described in the latest version of ASTM D3350, except that carbon black content should not exceed 4%.

Installation shall be in accordance with ASTM D2321 and ADS recommended installation guidelines, with the exception that minimum cover in trafficked areas for 4- through 48-inch (100 to 1200 mm) diameters shall be one foot. (0.3 m) and for 60-inch (1500 mm) diameters, the minimum cover shall be 2 ft. (0.6 m) in single run applications. Backfill for minimum cover situations shall consist of Class 1 (compacted), or Class 2 (minimum 90% SPD) material. Maximum fill heights depend on embedment material and compaction level and should be in accordance with manufacturer's recommendations.

2. **ADS HP STORM**: Pipe sizes 12" HDPE: 12- through 30-inch (300 to 750 mm) pipe shall have a smooth interior and annular exterior corrugations and meet or exceed ASTM F2736 and AASHTO MP-21-11. Pipe shall be joined with a gasketed integral bell & spigot joint meeting the requirements of ASTM F2736 and F2881, for the respective diameters. 12- through 60-inch (300 to 1500 mm) shall be watertight according to the requirements of ASTM D3212. Spigots shall have gaskets meeting the requirements of ASTM F477. Gasket shall be installed by the pipe manufacturer and covered with a removable, protective wrap to ensure the gasket is free from debris. A joint lubricant available from the manufacturer shall be used on the gasket and bell during assembly. 12- through 60-inch (300 to 1500 mm) diameters shall have a reinforced bell with a polymer composite band installed by the manufacturer.

Fittings shall conform to ASTM F2736, ASTM F2881 and AASHTO MP-21-11, for the respective diameters. Bell & spigot connections shall utilize a spun-on, welded or integral bell and spigot with gaskets meeting ASTM F477. Bell & spigot fittings joint shall meet the watertight joint performance requirements of ASTM D3212. Corrugated couplings shall be split collar, engaging at least 2 full corrugations.

To assure watertightness, field performance verification may be accomplished by testing in accordance with ASTM F2487. Appropriate safety precautions must be used when field-testing any pipe material. Contact the manufacturer for recommended leakage rates.

Polypropylene compound for pipe and fitting production shall be impact modified copolymer meeting the material requirements of ASTM F2736, Section 4, ASTM F2881, Section 5 and AASHTO MP-21-11, Section 6.1, for the respective diameters.

Installation shall be in accordance with ASTM D2321 and ADS recommended installation guidelines, with the exception that minimum cover in traffic areas for 12- through 48-inch (300 to 1200 mm) diameters shall be one foot. (0.3 m) and for 60-inch (1500 mm) diameters, the minimum cover shall be 2 ft. (0.6 m) in single run applications. Backfill for minimum cover situations shall consist of Class 1, Class 2 (minimum 90% SPD) or Class 3 (minimum 95%) material. Maximum fill heights depend on embedment material and compaction level; please refer to manufacturer's recommendations

2.2 CONCRETE PIPE AND FITTINGS

- A. Reinforced-Concrete Sewer Pipe and Fittings Pipe sizes 15"-48": ASTM C 76 (ASTM C 76M).
 - 1. Bell-and-spigot or tongue-and-groove ends and gasketed joints with ASTM C 443 (ASTM C 443M), rubber gaskets sealant joints with ASTM C 990 (ASTM C 990M), bitumen or butyl-rubber sealant.
 - 2. Class III, Wall B or Class IV if cover is less than 18" per SCDOT fill height tables.

2.3 MANHOLES

- A. Standard Precast Concrete Manholes:
 - 1. Description: ASTM C 478 (ASTM C 478M), precast, reinforced concrete, of depth indicated, with provision for sealant joints.
 - 2. Diameter: 48 inches (1200 mm) minimum unless otherwise indicated.
 - 3. Ballast: Increase thickness of precast concrete sections or add concrete to base section as required to prevent flotation.
 - 4. Base Section: 6-inch (150-mm) minimum thickness for floor slab and 4-inch (102-mm) minimum thickness for walls and base riser section, and separate base slab or base section with integral floor.
 - 5. Riser Sections: 4-inch (102-mm) minimum thickness, and lengths to provide depth indicated.
 - 6. Top Section: Eccentric-cone type unless concentric-cone or flat-slab-top type is indicated, and top of cone of size that matches grade rings.
 - 7. Joint Sealant: ASTM C 990 (ASTM C 990M), bitumen or butyl rubber.

STORM UTILITY DRAINAGE PIPING

- 8. Resilient Pipe Connectors: ASTM C 923 (ASTM C 923M), cast or fitted into manhole walls, for each pipe connection.
- 9. Steps: ASTM A 615/A 615M, deformed, 1/2-inch (13-mm) steel reinforcing rods encased in ASTM D 4101, PP, wide enough to allow worker to place both feet on one step and designed to prevent lateral slippage off step. Cast or anchor steps into sidewalls at 12- to 16-inch (300- to 400-mm) intervals. Omit steps if total depth from floor of manhole to finished grade is less than 60 inches (1500 mm).
- 10. Adjusting Rings: Interlocking HDPE rings with level or sloped edge in thickness and diameter matching manhole frame and cover, and of height required to adjust manhole frame and cover to indicated elevation and slope. Include sealant recommended by ring manufacturer.
- 11. Grade Rings: Reinforced-concrete rings, 6- to 9-inch (150- to 225-mm) total thickness, to match diameter of manhole frame and cover, and height as required to adjust manhole frame and cover to indicated elevation and slope.
- B. Manhole Frames and Covers:
 - 1. Description: Ferrous; 24-inch (610-mm) ID by 7- to 9-inch (175- to 225-mm) riser with 4-inch- (102-mm-) minimum width flange and 26-inch- (660-mm-) diameter cover. Include indented top design with lettering cast into cover, using wording equivalent to "STORM SEWER."
 - 2. Material: ASTM A 48/A 48M, Class 35 gray iron unless otherwise indicated.
- C. Built in Place concrete Brick Manholes: Built in place structures in accordance with SCDOT Standard Specification 719 and in accordance with SCDOT Standard Details.

2.4 STORMWATER STRUCTURES

- A. Standard Precast Concrete Stormwater Structures:
 - 1. Description: ASTM C 478 (ASTM C 478M), precast, reinforced concrete, of depth indicated, with provision for sealant joints.
 - 2. Base Section: 6-inch (150-mm) minimum thickness for floor slab and 4-inch (102-mm) minimum thickness for walls and base riser section, and separate base slab or base section with integral floor.
 - 3. Riser Sections: 4-inch (102-mm) minimum thickness, 48-inch (1200-mm) diameter, and lengths to provide depth indicated.
 - 4. Top Section: Eccentric-cone type unless concentric-cone or flat-slab-top type is indicated. Top of cone of size that matches grade rings.
 - 5. Joint Sealant: ASTM C 990 (ASTM C 990M), bitumen or butyl rubber.
 - 6. Adjusting Rings: Interlocking rings with level or sloped edge in thickness and shape matching catch basin frame and grate. Include sealant recommended by ring manufacturer.
 - 7. Grade Rings: Include two or three reinforced-concrete rings, of 6- to 9-inch (150- to 225mm) total thickness, that match 24-inch- (610-mm-) diameter frame and grate.
 - 8. Steps: ASTM A 615/A 615M, deformed, 1/2-inch (13-mm) steel reinforcing rods encased in ASTM D 4101, PP, wide enough to allow worker to place both feet on one step and designed to prevent lateral slippage off step. Cast or anchor steps into sidewalls

at 12- to 16-inch (300- to 400-mm) intervals. Omit steps if total depth from floor of catch basin to finished grade is less than 60 inches (1500 mm).

B. Frames and Grates: See Plans

PART 3 - EXECUTION

3.1 EARTHWORK

- A. Excavation, trenching, and backfilling of Storm Drainage Piping to be in accordance with SCDOT Standard Specification SC-M-714, for the respective type of pipe used with the following exceptions:
 - 1. Video Inspection will be required on the storm installation.

3.2 PIPING INSTALLATION

- A. General Locations and Arrangements: Drawing plans and details indicate general location and arrangement of underground storm drainage piping. Location and arrangement of piping layout take into account design considerations. Install piping as indicated, to extent practical. Where specific installation is not indicated, follow piping manufacturer's written instructions.
- B. Install piping beginning at low point, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Install gaskets, seals, sleeves, and couplings according to manufacturer's written instructions for use of lubricants, cements, and other installation requirements.
- C. Install gravity-flow, nonpressure drainage piping according to SCDOT Specifications.

3.3 PIPE JOINT CONSTRUCTION

A. Join gravity-flow, nonpressure drainage piping according to SCDOT Supplemental Technical Specification SC-M-714, latest edition.

3.4 MANHOLE INSTALLATION

A. General: Install manholes and Catch Basins in accordance with SCDOT Standard Specification Section 719, latest edition.

3.5 CONCRETE PLACEMENT

A. Place cast-in-place concrete according to ACI 318.

3.6 FIELD QUALITY CONTROL

A. Visually inspect 100% of pipe for fractures, cracks, spalling, chips, and breaks during all phases of the installation process. Inspect joints, including tongues and grooves. Inspect installed joints for missing, damaged, or improperly installed joint sealant or gasket. Inspect interior of piping to determine whether line displacement or other damage has occurred. Inspect after approximately 24 inches of backfill is in place, and again at completion of Project.

1.Defects requiring correction include the following:

- a. Alignment: Less than full diameter of inside of pipe is visible between structures.
- b. Deflection: Flexible piping with deflection that prevents passage of 9-Fin Mandrel.
- c. Crushed, broken, cracked, or otherwise damaged piping.
- d. Infiltration: Water leakage into piping.
- e. Exfiltration: Water leakage from or around piping.
- 2. Replace defective piping using new materials, and repeat inspections until defects are corrected.
- B. Video Inspect Storm drainage after backfill and Provide digital copy of video inspection to Engineer.
- C. Replace leaking piping using new materials, and repeat testing until leakage is within allowances specified.

1. Inspect interior of piping to determine whether line displacement or other damage has occurred. Inspect after approximately 24 inches (610 mm) of backfill is in place, and again at completion of Project.

3.7 CLEANING

1. Clean interior of piping of dirt and superfluous materials. Flush with water.

END OF SECTION 334100

IV. AWARD / CONTRACT TERM

Intent of Award will be issued on March 26, 2019 by 5:00 PM, after the protest period is over a Notice to Proceed will be issued. All are subject to approval from The School District of Newberry County Board of Trustees. The contractor must hold firm pricing until the to be determined start date of the project or 90 days of the Notice to Proceed date.

V. TERMS AND CONDITIONS

- 1. <u>ASSIGNMENT</u>: No contract or its provisions may be assigned, sublet, or transferred without the written consent of the Procurement Officer.
- 2. <u>BANKRUPTCY</u>: (a) Notice. In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish written notification of the bankruptcy to School District of Newberry County. This notification shall be furnished within five (5) days of the initiation of the proceedings relating to the bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of all District contracts against which final payment has not been made. This obligation remains in effect until final payment under this Contract. (b) Termination. This contract is voidable and subject to immediate termination by the District upon the contractor's insolvency, including the filing of proceedings in bankruptcy.
- 3. <u>CHOICE-OF-LAW</u>: The Agreement, any dispute, claim, or controversy relating to the Agreement, and all the rights and obligations of the parties shall, in all respects, be interpreted, construed, enforced and governed by and under the laws of the State of South Carolina, except its choice of law rules. As used in this paragraph, the term "Agreement" means any transaction or agreement arising out of, relating to, or contemplated by the solicitation.
- 4. <u>CONTRACT DOCUMENTS & ORDER OF PRECEDENCE</u>: (a) Any contract resulting from this solicitation shall consist of the following documents: (1) a Record of Negotiations, if any, executed by you and the Procurement Officer, (2) documentation regarding the clarification of an offer [Article 5, Section1530. 8], if applicable, (3) the solicitation, as amended, (4) modifications, if any, to your offer, if accepted by the Procurement Officer, (5) your offer, (6) any statement reflecting the District's final acceptance (a/k/a "award"), and (7) purchase orders. These documents shall be read to be consistent and complimentary. Any conflict among these documents shall be resolved by giving priority to these documents in the order listed above. (b) The terms and conditions of documents (1) through (6) above shall apply notwithstanding any additional or different terms and conditions in either (i) a purchase order or other instrument submitted by the District or (ii) any invoice or other document submitted by Contractor. Except as otherwise allowed herein, the terms and conditions of all such documents shall be void and of no effect. (c) Any document signed or otherwise agreed to by persons other than the Procurement Officer shall be void and of no effect.
- 5. <u>DISCUSSIONS WITH PROPOSERS</u>: After opening, the Procurement Officer may, in his sole discretion, initiate discussions with you to discuss your bid. Discussions are possible only if your bid is apparently responsive and only for the purpose of clarification to assure your full understanding of the solicitation's requirements. Any discussions will be documented in writing and shall be included with the bid.
- 6. <u>DISPUTES</u>: (1) Choice-of-Forum. All disputes, claims, or controversies relating to an Agreement shall be resolved exclusively by the Chief Procurement Officer in accordance with Title 11, Chapter 35, Article 17 of the South Carolina Code of Laws, or in the absence of jurisdiction, only in the Court of Common Pleas for, or a federal court in the State of South Carolina. Contractor agrees that any act by School District of Newberry County regarding an Agreement is not a waiver of either the District's sovereign immunity or immunity under the Eleventh Amendment of the United State's Constitution. As used in this paragraph, the term "Agreement" means any transaction or agreement arising out of, relating to, or contemplated by this solicitation. (2) Service of Process. Contractor consents that any papers, notices, or process necessary or proper for the initiation or continuation of any disputes, claims, or controversies relating to an Agreement; for any court action in connection therewith; or for the entry of judgment on any award made, may be served on Contractor by certified mail (return receipt requested) addressed to Contractor at the address provided, or by personal service, or by any other manner that is permitted by law, in or outside South Carolina. Notice by certified mail is deemed duly given upon deposit in the United States mail.
- 7. <u>EQUAL OPPORTUNITY</u>: Contractor is referred to and shall comply with all applicable provisions, if any, of Title 41, Part 60 of the Code of Federal Regulations, including but not limited to Sections 60-1.4, 60-4.2, 60-4.3, 60-250.5(a), and 60-741.5(a), which are hereby incorporated by reference.
- 8. <u>FALSE CLAIMS</u>: According to the S.C. Code of Laws Section 16-13-240, "a person who by false pretense or representation obtains the signature of a person to a written instrument or obtains from another person any chattel, money, valuable security, or other property, real or personal, with intent to cheat and defraud a person of that property is guilty" of a crime.

- 9. FORCE MAJURE: The Contractor shall not be liable for any excess costs if the failure to perform the contract arises out of causes beyond the control and without the fault or negligence of the contractor. Such causes may include, but are not restricted to acts of God or of the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather; but in every case the failure to perform must be beyond the control and without the fault or negligence of the contractor. If the failure to perform is caused by the default of a subcontractor, and if such default arises out of causes beyond the control of both the contractor and subcontractor, and without the fault or negligence of shall not be liable for any excess costs for failure to perform, unless the supplies or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the contractor to meet the required delivery schedule.
- 10. NON-INDEMNIFICATION: Any term or condition is void to the extent it requires the District to indemnify anyone.
- 11. <u>NOTICE</u>: (A) After award, any notices shall be in writing and shall be deemed duly given (1) upon actual delivery, if delivery is by hand, (2) upon receipt by the transmitting party of automated confirmation or answer back from the recipient's device if delivery is by telex, telegram, facsimile, or electronic mail, or (3) upon deposit into the United States mail, if postage is prepaid, a return receipt is requested, and either registered or certified mail is used.
- 12. <u>PUBLICITY</u>: Contractor shall not publish any comments or quotes by School District of Newberry County employees, or include the District in either news releases or a published list of customers, without the prior written approval of the Procurement Officer.
- 13. <u>PURCHASE ORDERS</u>: Contractor shall not perform any work prior to the receipt of a purchase order from the District. The District shall order any supplies to be furnished under this contract by issuing a purchase order. Purchase orders may be used to elect any options available under this contract, e.g., quantity, item, delivery date, payment method, but are subject to all terms and conditions of this contract. Purchase orders may be electronic. No particular form is required.
- 14. <u>SETOFF:</u> The District shall have all of its legal, equitable, and statutory rights of set-off. These rights shall include, but not be limited to, the District's option to withhold for the purposes of set-off any moneys due to the Contractor under this contract up to any amounts due and owing to the District with regard to this contract including any contract for a term commencing prior to the term of this contract, plus any amounts due and owing to the District for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto.
- 15. <u>SURVIVAL OF OBLIGATION</u>: The Parties' rights and obligations which, by their nature, would continue beyond the termination, cancellation, rejection, or expiration of this contract shall survive such termination, cancellation, rejection, or expiration, including, but not limited to, the rights and obligations created by the following clauses: Indemnification Third Party Claims, Intellectual Property Indemnification, and any provisions regarding warranty or audit.
- 16. <u>TERMINATION DUE TO UNAVAILABILITY OF FUNDS</u>: Payment and performance obligations for succeeding fiscal periods shall be subject to the availability and appropriation of funds thereof. When funds are not appropriated or otherwise made available to support continuation of performance in a subsequent fiscal period, the contract shall be canceled. Contractor will not be reimbursed any costs beyond the initial contract term.
- 17. <u>THIRD PARTY BENEFICIARY</u>: This Contract is made solely and specifically among and for the benefit of the parties hereto, and their respective successors and assigns, and no other person will have any rights, interest, or claims hereunder or be entitled to any benefits under or on account of this Contract as a third party beneficiary or otherwise.
- 18. <u>WAIVER:</u> The District does not waive any prior or subsequent breach of the terms of the Contract by making payments on the Contract, by failing to terminate the Contract for lack of performance, or by failing to strictly or promptly insist upon any term of the Contract. Only the Procurement Officer has actual authority to waive any of the District's rights under this Contract. Any waiver must be in writing.

VI. SPECIAL INSTRUCTIONS

1. CHANGES:

- (1) Contract Modification. By a written order, at any time, and without notice to any surety, the Procurement Officer may, subject to all appropriate adjustments, make changes within the general scope of this contract in any one or more of the following:
 - (a) drawings, designs, or specifications, if the supplies to be furnished are to be specially manufactured for the [District] in accordance therewith;
 - (b) method of shipment or packing;
 - (c) place of delivery;
 - (d) description of services to be performed;
 - (e) time of performance (i.e., hours of the day, days of the week, etc.); or,
 - (f) place of performance of the services.

Subparagraphs (a) to (c) apply only if supplies are furnished under this contract. Subparagraphs (d) to (f) apply only if services are performed under this contract.

- (2) Adjustments of Price or Time for Performance. If any such change increases or decreases the contractor's cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, an adjustment shall be made in the contract price, the delivery schedule, or both, and the contract modified in writing accordingly. Any adjustment in contract price made pursuant to this clause shall be determined in accordance with the Price Adjustment Clause of this contract. Failure of the parties to agree to an adjustment shall not excuse the contractor from proceeding with the contract as changed, provided that the District promptly and duly make such provisional adjustments in payment or time for performance as may be reasonable. By proceeding with the work, the contractor shall not be deemed to have prejudiced any claim for additional compensation, or an extension of time for completion.
- (3) Time Period for Claim. Within 30 days after receipt of a written contract modification under Paragraph (1) of this clause, unless such period is extended by the Procurement Officer in writing, the contractor shall file notice of intent to assert a claim for an adjustment. Later notification shall not bar the contractor's claim unless the District is prejudiced by the delay in notification.
- (4) Claim Barred After Final Payment. No claim by the contractor for an adjustment hereunder shall be allowed if notice is not given prior to final payment under this contract.
- 2. <u>COMPLIANCE WITH LAWS</u>: During the term of the contract, contractor shall comply with all applicable provisions of laws, codes, ordinances, rules, regulations, and tariffs.
- 3. <u>CONTRACTOR'S LIABILITY INSURANCE REQUIREMENTS</u>: The successful contractor must furnish within ten (10) days after written acceptance of bid a copy of his Worker's Compensation and/or General Liability insurance certificate to the District. Worker's Compensation coverage shall meet the requirements of South Carolina law. It is agreed that the coverage, as stated, shall not be cancelled or altered until ten (10) days after written notice of any change has been sent by registered mail to the Procurement Department. School District of Newberry County shall be listed as Certificate Holder.
- 4. The insurance required by this paragraph shall be written for not less than the following limits of liability or as required by law, whichever coverage is greater:

COMMERCIAL GENERAL LIABILITY:	
General Aggregate (per project)	\$1,000,000
Products/Completed Operations	\$1,000,000
Personal and Advertising Injury	\$1,000,000
Each Occurrence	\$1,000,000
Fire Damage (Any one fire)	\$ 50,000
Medical Expense (Any one person)	\$ 5,000

BUSINESS AUTO LIABILITY (including All Owned, Non-owned, and Hired Vehicles): Combined Single Limit \$1,000,000

WORKERS COMPENSATION: State Statutory	
Employees Liability-per accident	\$100,000
Disease – Policy Limit	\$500,000
Disease, Each Employee Limit	\$100,000

Required Documentation: (a) Prior to commencement of the work, contractor shall provide to the District a signed, original certificate of liability insurance (ACORD 25). The certificate shall identify the types of insurance, state the limits of liability for each type of coverage, include a provision for 30 days notice prior to cancellation, name every applicable using governmental unit (as identified on the cover Page) as a Certificate Holder, provide that the general aggregate limit applies per project, and provide

that coverage is written on an occurrence basis. (b) Prior to commencement of the work, contractor shall provide to the District a written endorsement to the contractor's general liability insurance policy that (i) names School District of Newberry County (as identified on the Cover Page) as an additional insured, (ii) provides that no material alteration, cancellation, non-renewal, or expiration of the coverage contained in such policy shall have effect unless the named governmental unit(s) has been given at least thirty (30) days prior written notice, and (iii) provides that the Contractor's liability insurance policy shall be primary, with any liability insurance of the District as secondary and noncontributory. (c) Both the certificate and the endorsement must be received directly from either the contractor's insurance agent or the insurance company. Contractor shall provide a minimum of thirty (30) days written notice to the District of any proposed reduction of coverage limits (on account of revised limits or claims paid under the General Aggregate) or any substitution of insurance carriers. The District's failure to demand either a certificate of insurance or written endorsement required by this paragraph is not a waiver of contractor's obligations to obtain the required insurance.

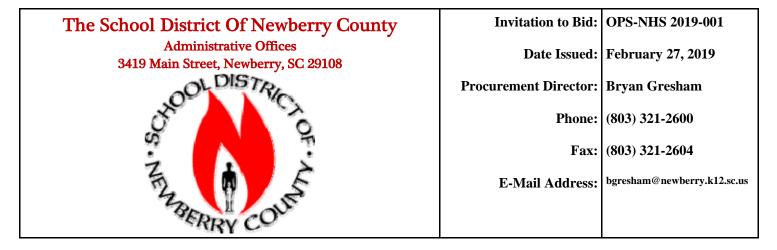
- 5. <u>CONTRACTOR PERSONNEL</u>: The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Contract. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.
- 6. <u>CONTRACTOR'S OBLIGATION</u>: The contractor shall provide and pay for all materials, tools, equipment, labor and professional and non-professional services, and shall perform all other acts and supply all other things necessary, to fully and properly perform and complete the work. The contractor must act as the prime contractor and assume full responsibility for any subcontractor's performance. The contractor will be considered the sole point of contact with regard to all situations, including payment of all charges and the meeting of all other requirements.
- 7. <u>DAMAGES LIMITATION</u>: Contractor's maximum liability, if any, to the District for all direct, indirect, incidental, punitive, consequential, or special damages, including without limitation contract damages and damages for injuries to persons or property, whether arising from licensor's breach of this agreement, breach of warranty, negligence, strict liability, or other tort, or otherwise with respect to the supplies, services, or software provided under this agreement, shall in no event exceed an amount equal to the total contract price. In no event shall any party be liable to another for any indirect, incidental, punitive, consequential, or special damages, including, without limitation, lost revenues and profits, even if it has been advised of the possibility of such damages.
- 8. <u>DEFAULT</u>: The District may terminate this contract, or any part hereof, for cause in the event of any default by the contractor, or if the contractor fails to comply with any contract terms and conditions, or fails to provide the District, upon request, with adequate assurances of future performance. In the event of termination for cause, the District shall not be liable to the contractor for any amount for supplies or services not accepted, and the contractor shall be liable to the District for any and all rights and remedies provided by law. If it is determined that the District improperly terminated this contract for default, such termination shall be deemed a termination for convenience.
- 9. <u>DESCRIPTIVE LITERATURE</u>: Your offer must include manufacturer's latest literature showing complete product specifications.
- 10. <u>DISPOSAL OF PACKAGING</u>: Contractor shall dispose of all wrappings, crating, and other disposable materials pertaining to this contract at the end of each working day and upon completion of installation.
- 11. <u>ILLEGAL IMMIGRATION</u>: By signing your offer, you certify that you will comply with the applicable requirements of Title 8, Chapter 14 of the South Carolina Code of Laws and agree to provide to the District, upon request, any documentation required to establish either: (a) that Title 8, Chapter 14 is inapplicable to you and your subcontractors or sub-subcontractors; or (b) that you and your subcontractors or sub-subcontractors are in compliance with Title 8, Chapter 14. Pursuant to Section 8-14-60, "A person who knowingly makes or files any false, fictitious, or fraudulent document, statement, or report pursuant to this chapter is guilty of a felony and, upon conviction, must be fined within the discretion of the court or imprisoned for not more than five years, or both." You agree to include in any contracts with your subcontractors language requiring your subcontractors to (a) comply with the applicable requirements of Title 8, Chapter 14, and (b) include in their contracts with the sub-subcontractors language requiring the sub-subcontractors to comply with the applicable requirements of Title 8, Chapter 14.
- 12. <u>INDEMNIFICATION-THIRD PARTY CLAIMS:</u> Notwithstanding any limitation in this agreement, Contractor shall defend and indemnify School District of Newberry County, its departments, board, and all their respective officers, agents and employees against all suits or claims of any nature (and all damages, settlement payments, attorneys' fees, costs, expenses, losses or liabilities attributable thereto) by any third party which arise out of, or result in any way from, any defect in the goods or services acquired hereunder or from any act or omission of Contractor, its subcontractors, their employees, workmen, servants or agents. Contractor shall be given written notice of any suit or claim. The District shall allow Contractor to defend such claim so long as such defense is diligently and capably prosecuted through legal counsel. The District shall allow Contractor to settle such suit or claim so long as (i) all settlement payments are made by (and any deferred settlement payments are the sole liability of) Contractor, and (ii) the settlement imposes no non-monetary obligation upon the District. The District shall not admit liability or agree to a settlement or other disposition of the suit or claim, in whole or in part, without the prior written consent of Contractor.

The District shall reasonably cooperate with Contractor's defense of such suit or claim. The obligations of this paragraph shall survive termination of the parties' agreement.

- 13. <u>LICENSES AND PERMITS</u>: During the term of the contract, the Contractor shall be responsible for obtaining, and maintaining in good standing, all licenses (including professional licenses, if any), permits, inspections and related fees for each or any such licenses, permits and /or inspections required by the State, county, city or other government entity or unit to accomplish the work specified in this solicitation and the contract.
- 14. <u>MATERIAL AND WORKMANSHIP</u>: Unless otherwise specifically provided in this contract, all equipment, material, and articles incorporated in the work covered by this contract are to be new and of the most suitable grade for the purpose intended.
- 15. <u>OFFERING BY LOT</u>: Offers may be submitted for one or more complete lots. Failure to offer on all items within a lot will be reason for rejection.
- 16. <u>OSHA CFR 1910.1200</u> (SCRR article 1, 71-1910.1200). By submission of this bid, the vendor agrees to take all necessary steps to ensure compliance with the requirements.
- 17. <u>OWNERSHIP OF DATA and MATERIALS</u>: All data, material and documentation prepared for the District pursuant to this contract shall belong exclusively to the District.
- 18. <u>PRICE ADJUSTMENTS LIMITED BY CPI "Other Goods & Services"</u>: Upon request and adequate justification, the Procurement Officer may grant a price increase up to, but not to exceed, the unadjusted percent change for the most recent 12 months for which data is available, that is not subject to revision, in the Consumer Price Index (CPI) for all urban consumers (CPI-U), "Other Goods & Services" for products, as determined by the Procurement Officer. The Bureau of Labor and Statistics publishes this information on the web at www.bls.gov.
- 19. <u>SHIPPING/RISK OF LOSS</u>: F.O.B. Destination. Destination is the shipping location of the Districts' designated receiving site, as specified herein.
- 20. TERMINATION FOR CONVENIENCE: (A) Termination-The Procurement Officer may terminate this contract in whole or in part, for the convenience of the District. The Procurement Officer shall give written notice of the termination to the contractor specifying the part of the contract terminated and when termination becomes effective. (B) Contractor's Obligations-The contractor shall incur no further obligations in connection with the terminated work and on the date set in the notice of termination the contractor will stop work to the extent specified. The contractor shall also terminate outstanding orders and subcontracts as they relate to the terminated work. The contractor shall settle the liabilities and claims arising out of the termination of subcontracts and orders connected with the terminated work. The Procurement Officer may direct the contractor to assign the contractor's right, title, and interest under terminated orders or subcontracts to the State. The contractor must still complete the work not terminated by the notice of termination and may incur obligations as are necessary to do so. (3) Right to Supplies-The Procurement Officer may require the contractor to transfer title and deliver to the District in the manner and to the extent directed by the Procurement Officer: (a) any completed supplies; and (b) such partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights (hereinafter called "manufacturing material") as the contractor has specifically produced or specially acquired for the performance of the terminated part of this contract. The contractor shall, upon direction of the Procurement Officer, protect and preserve property in the possession of the contractor in which the District has an interest. If the Procurement Officer does not exercise this right, the contractor shall use best efforts to sell such supplies and manufacturing materials in accordance with the standards of Uniform Commercial Code Section 2-706. Utilization of this Section in no way implies that the District has breached the contract by exercise of the Termination for Convenience Clause. (4) Compensation. (a) The contractor shall submit a termination claim specifying the amounts due because of the termination for convenience together with cost or pricing data required by Article 5, Section 1830 bearing on such claim. If the contractor fails to file a termination claim within one year from the effective date of termination, the Procurement Officer may pay the contractor, if at all, an amount set in accordance with Subparagraph (c) of this Paragraph. (b) The Procurement Officer and the contractor may agree to a settlement and that the settlement does not exceed the total contract price plus settlement costs reduced by payments previously made by the District, the proceeds of any sales of supplies and manufacturing materials under Paragraph (3) of this clause, and the contract price of the work not terminated; (c) Absent complete agreement under Subparagraph (b) of this Paragraph, the Procurement Officer shall pay the contractor the following amounts, provided payments agreed to under Subparagraph (b) shall not duplicate payments under this Subparagraph: (i) contract prices for supplies or services accepted under the contract; (ii) costs reasonably incurred in performing the terminated portion of the work less amounts paid or to be paid for accepted supplies or services; (iii) reasonable costs of settling and paying claims arising out of the termination of subcontracts or orders pursuant to Paragraph (2) of this clause. These costs must not include costs paid in accordance with Subparagraph (c) (ii) of this paragraph; (iv) any other reasonable costs that have resulted from the termination. The total sum to be paid the contractor under this Subparagraph shall not exceed the total contract price plus the reasonable settlement costs of the contractor reduced by the amount of payments otherwise made, the proceeds of any sales of supplies and

manufacturing materials under Subparagraph (b) of this Paragraph, and the contract price of work not terminated. (d) Contractor must demonstrate any costs claimed, agreed to, or established under Subparagraphs (b) and (c) of this Paragraph using its standard record keeping system, provided such system is consistent with any applicable Generally Accepted Accounting Principles. (5) Contractor's failure to include an appropriate termination for convenience clause in any subcontract shall not (i) affect the District's right to require the termination of a subcontract, or (ii) increase the obligation of the state beyond what it would have been if the subcontract had contained an appropriate clause.

21. <u>WARRANTY</u>: Contractor must provide the manufacturer's standard written warranty upon delivery of product. Contractor warrants that manufacturer will honor the standard written warranty provided. The district mandates that the contractor must warrantee all associated work under this contract for one year passed the substantial completion date.



Project: NHS Track and Field

Attachment 1 of 2

Contract Price:

LINE ITEM	Description	Total Price
0001	For all Work Specified in Scope of Work. (Figures Only)	\$

Addendum:

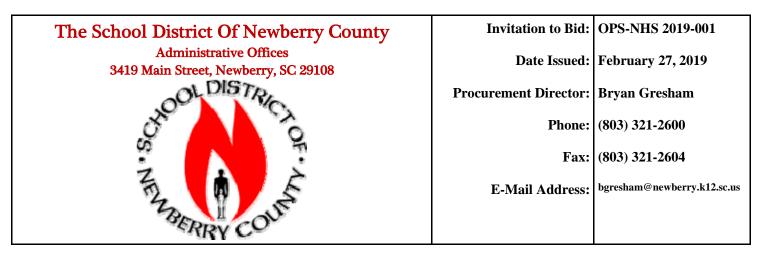
Addendum A Acknowledged: _____

Addendum B Acknowledged: _____

Addendum C Acknowledged: _____

Company Name (Please print):

Representative Name & Title (Please print):



Statement of Acceptance

Project: NHS Track and Field

Attachment 2 of 2

I, the undersigned, have read Solicitation and do fully understand all of the requirements stated therein and affirm that the above pricing is representative of an acceptable performance level which would fully meet the expectations of the District.

Bid Preparer (please print)

Company Name

Bid Preparer (signature)

Company Address

Telephone Number

Fax Number

Email address (if available)