Date: **March 14, 2023**

To: **Plan Holders**

Company:

Project No.:

Phone No.:

Fax No.:

From: **The University of Southern Mississippi**

Subject: **ADDENDUM NO. 1**
SYNTHETIC TURF REPLACEMENT
CARLISLE-FAULKNER FIELD
UNIVERSITY OF SOUTHERN MISSISSIPPI
Hattiesburg, Mississippi

Attached is Addendum No. 1 for the above referenced project.

Plan Holders are reminded that this Addendum must be acknowledged on Page 00300-6 of the Bidders Proposal.

Please acknowledge receipt of this Addendum by signing in the space provided below and return this page by facsimile to: Neel-Schaffer, Inc., Fax Number: (601) 545-2267, or e-mail your acknowledgment to Jennifer.Nobles@neel-schaffer.com before 2:00 P.M., Friday, March 17, 2023.

NAME:_____ DATE: _____ TIME: _____

COMPANY (Please Print):_____

You should receive (15) pages **including this cover sheet.** Please notify us if the message is incomplete or unclear. Thank you.

SPECIFICATIONS

1. Replace SPECIAL PROVISION 907-242-1 SYNTHETIC TURF SYSTEM form in its entirety and replace with attached **SPECIAL PROVISION 907-242-1 SYNTHETIC TURF SYSTEM** form. (11 PAGES)

CONTRACT DOCUMENTS

1. REPLACE working number GN-1 (INDEX & GENERAL NOTES) with the attached **GN-1 (INDEX & GENERAL NOTES)**, revised per ADDENDUM #1 **Note that there are changes to General Note #8.** (1 SHEET).

2. REPLACE working number PLN-3 (SITE PLAN – FIELD MARKING & LOGOS) with the attached **PLN-3 (SITE PLAN – FIELD MARKING & LOGOS)**, revised per ADDENDUM #1. (1 SHEET).

SPECIAL PROVISION 907-242-1

SYNTHETIC TURF SYSTEM

SLIT-FILM 2.5" FTHD-1: CLASSIC HD (BASE BID)
W/ COOLING COMPOSITE (ADD ALT#1)

PART 1 - GENERAL

1.1 SUMMARY

A. Furnish all labor, materials, tools, and equipment necessary to install slit-film artificial grass FieldTurf (OR APPROVED EQUAL) as indicated on the plans and as specified herein; including components and accessories required for a complete installation including but not limited to

1. Acceptance of prepared sub-base.
2. Coordination with related trades to ensure a complete, integrated, and timely installation: Aggregate base course, sub-base material (tested for permeability), grading and compacting, piping and drain components (when required); as provided under its respective trade section.

B. PRE-APPROVAL for Synthetic Turf Manufacturers is required for ALL bidders submitting approved equals. This includes products and manufacturers considered "basis of design".

1. Send ALL Approved Equal Synthetic Turf Product Pre-Approval information to the following name and address.

   Neel-Schaffer, Inc
   Attn: Austin Lovitt, ASLA
   704 Hardy Street
   Hattiesburg, MS 39401

   Direct all questions about pre-approval process to Austin.lovitt@neel-schaffer.com

***** APPLICATIONS FOR SYNTHETIC TURF APPROVED EQUALS, ARE REQUIRED TO BE SUBMITTED 10 CALENDAR DAYS PRIOR TO THE BID OPENING FOR PRE-APPROVAL. BIDDERS WHO DO NOT PROVIDE THE REQUIRED PRODUCT SUBMITTALS, AND THE SUPPORTING INFORMATION REQUESTED IN THIS SECTION MAY HAVE THEIR BID DETERMINED TO BE NON-RESPONSIVE. ADDITIONALLY, THE SYNTHETIC TURF SUBMITTAL SHEET (SPECIAL PROVISION 907-242-1B), LOCATED AFTER THIS SECTION IS REQUIRED TO BE FILLED OUT AND SUBMITTED 10 DAYS PRIOR TO THE BID OPENING. *****

1.2 RELATED SECTIONS

1.3 REFERENCE STANDARDS

A. FM Factory Mutual
   1. P7825 - Approval Guide; Factory Mutual Research Corporation; current edition

B. ASTM – American Society for Testing and Materials.
   1. D1907 - Standard Test Method for Denier
   2. D5848 - Standard Test Method for Mass Per Unit Area of Pile Yarn Floor Covering
   3. D1338 - Standard Test Method for Tuft Bind of Pile Yarn Floor Covering
   4. D1682 - Standard Method of Test for Breaking Load and Elongation of Textile Fabrics
   5. D5034 - Standard Test Method of Breaking Strength and Elongation of Textile Fabrics (Grab Test)
   6. F1551 - Standard Test Methods for Water Permeability
   7. D2859 - Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials
   8. F355 - Standard Test Method for Shock-Absorbing Properties of Playing Surfaces.
   9. F1936 - Standard Test Method for Shock-Absorbing Properties of North American Football Field Playing Systems as Measured in the Field

1.4 SUBMITTALS

A. Substitutions: Other products are acceptable if in compliance with all requirements of these specifications. **Submit approved equal synthetic turf product applications to project Landscape Architect for review a minimum of ten (10) calendar days prior to bidding in accordance with Part 1.1-B and Part 2.1 of this section. After review, an acceptance or denial response will be provided to the applicants in a timely manner.**
   1. Provide substantiation that the proposed system does not violate any other manufacturer's patents, patents allowed or patents pending.
   2. Provide a sample copy of insured, non-prorated warranty and insurance policy information.

B. Comply with Section 01 33 00, Submittals Procedures. Submit for approval prior to fabrication.

C. Shop Drawings: Due during construction.
   1. Indicate field layout; field marking plan and details for the specified sports, i.e., NCAA Football; roll/seaming layout; methods of attachment, field openings and perimeter conditions.
   2. Show installation methods and construction indicating field verified conditions, clearances, measurements, terminations, drainage.
   3. Provide joint submission with related trades when requested by Landscape Architect.

D. Product Data: Due 10 Calendar Days Before the Bid Opening
   1. Submit manufacturer's catalog cuts, material safety data sheets (MSDS), brochures, specifications; preparation and installation instructions and recommendations; storage, handling requirements and recommendations.

2. Submit fiber manufacturer's name, type of fiber and composition of fiber.
3. Submit cryogenic suppliers name, sieve analysis and origin of materials
4. Submit data in sufficient detail to indicate compliance with the contract documents.
5. Submit manufacturer's instructions for installation.
6. Submit manufacturer's instructions for maintenance for the proper care and preventative maintenance of the synthetic turf system, including painting and markings.

E. Samples: Due 10 Calendar Days Before the Bid Opening Submit synthetic turf samples, 12 x 12 inches, representing the turf carpet portion of the product proposed for this project.

F. Product Certification: Due 10 Calendar Days Before the Bid Opening
1. Submit manufacturer's certification that products and materials comply with requirements of the specifications.
2. Submit test results indicating compliance with Reference Standards.

G. Project Record Documents: Record actual locations of seams, drains and other pertinent information in accordance with Specifications, General Requirements.

H. List of existing installations: Due 10 Calendar Days Before the Bid Opening. Submit list including respective Owner's representative and telephone number.

I. Warranties: Submit warranty and ensure that forms have been completed in Owner's name and registered with approved manufacturer.

J. Submit Bills of Lading/Material Delivery Receipts for synthetic turf infill materials. Bills of lading shall bear the name of the project/delivery address, quantity of materials delivered, source/location of origin of infill materials and/or manufacturer, and date of delivery.

K. Testing Certification: Due 10 Calendar Days Before the Bid opening. Submit certified copies of independent (third-party) laboratory reports on ASTM testing:
1. Pile Height, Face Weight & Total Fabric Weight, ASTM D5848.
2. Primary & Secondary Backing Weights, ASTM D5848.
3. Tuft Bind, ASTM D1335.
4. Grab Tear Strength, ASTM D1682 or D5034.
5. Water Permeability, ASTM F1551

L. The Turf Vendor shall submit a document holding the Owner and its representatives harmless as to any liability and or costs of any type, including but not limited to legal costs, royalties, replacement costs, etc. associated with any claim by the Turf Vendor or others associated and with any patents or infringements of any current or future patent issued for the synthetic turf product, infill materials, installation methods or drainage characteristics. It is not the intent of these documents to promote or induce the use of intellectual property belonging to others or promote infringement of any known or currently not known patents, licenses, or rights of others.

1.5 QUALITY ASSURANCE

A. Comply with Section 01 43 00, Quality Assurance.

B. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section. The turf contractor and/or the turf manufacturer:

1. Shall be experienced in the manufacture and installation of specified type of infilled slit-film synthetic grass system for a minimum of three years. This includes a slit-film fiber, backing, the backing coating, and the installation method.
2. Shall have minimum 500 slit-film fields in play for at least two years. Fields shall be 65,000 ft^2, or larger.
3. Shall a minimum of 500 fields that are still active, and at least 8 years old.\
4. Shall have a minimum of 1 FIFA Quality Pro recommended field in North America.
5. Shall have a minimum of 5 NFL game and/or practice fields in play for the previous year.
6. Shall have a minimum of 25 NCAA Division 1 game and/or practice fields in play for the previous year (Football or Soccer).
7. The manufacturer must have ISO 9001, ISO 14001 and OHSAS 18001 certifications demonstrating its manufacturing efficiency with regards to quality, environment, and safety management systems.
8. The fiber and turf carpet being proposed must have a documented Fiber Performance Index of at least 70. Official testing results must be provided 10 calendar days before the bid opening.
9. Artificial turf fiber proposed for the field(s) must have successfully undergone a minimum of 150,000 cycles on the Lisport wear test. This fiber must be the exact same fiber that is being proposed for the field(s). Official testing reports must be provided 10 calander days before the bid opening.
10. Manufacturer must provide proof 10 calendar days before the bid opening that its turf systems have been subject to long-term independent, epidemiological and peer reviewed studies proving its ability to provide for a safe surface.
11. Shall provide third-party laboratory testing 10 calendar days before the bid opening proving heat reduction qualities at an average of 35> degrees Fahrenheit, of the same infill materials used in the proposed turf system including the top layer extruded cooling composite.
12. Shall have a minimum of 250 references of fields installed with an extruded cooling composite installed as the top layer of infill.
13. Shall provide documents 10 calendar days before the bid opening that prove, or documents that substantiate, all of the items and/or requirements within this section (1.5-B)

C. Installer: Company shall specialize in performing the work of this section. The Contractor shall provide competent workmen skilled in this specific type of synthetic grass installation.
   1. The designated Supervisory Personnel on the project shall be certified, in writing by the turf manufacturer, as competent in the installation of specified slit-film material, including sewing seams and proper installation of the infill mixture.
   2. Installer shall be certified by the manufacturer and licensed.
   3. The installer supervisor shall have a minimum of 5 years' experience as either a construction manager or a supervisor of synthetic turf installations

D. Pre-Installation Conference: Conduct conference at project site at time to be determined by Landscape Architect. Review methods and procedures related to installation including, but not limited to, the following:
   1. Inspect and discuss existing conditions and preparatory work performed under other contracts.

2. In addition to the Contractor and the installer, arrange for the attendance of installers affected by the Work, The Owner's representative, and the Landscape Architect.

E. The Contractor shall verify special conditions required for the installation of the system.

F. The Contractor shall notify the Landscape Architect of any discrepancies.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Comply with Section 01 60 00, Product Requirements.

B. Prevent contact with materials that may cause dysfunction.

C. Deliver and store components with labels intact and legible.

D. Store materials/components in a safe place, under cover, and elevated above grade.

E. Protect from damage during delivery, storage, handling, and installation. Protect from damage by other trades.

F. Inspect all delivered materials and products to ensure they are undamaged and in good condition.

G. Comply with manufacturer's recommendations.

1.7 SEQUENCING AND SCHEDULING

A. Coordinate the Work with installation of work of related trades as the Work proceeds.

B. Sequence the Work to prevent deterioration of installed system.

1.8 WARRANTY AND GUARANTEE

A. See Section 01780 - Closeout Submittals, For Additional Warranty Requirements.

B. The Contractor shall provide a warranty to the Owner that covers defects in materials and workmanship of the turf for a period of ten (10) years from the date of substantial completion. The turf manufacturer must verify that their representative has inspected the installation and that the work conforms to the manufacturer's requirements. The manufacturer's warranty shall include general wear and damage caused from UV degradation. The warranty shall specifically exclude vandalism, and acts of God beyond the control of the Owner or the manufacturer. The warranty shall be fully third-party insured; prepaid for the entire 10-year term and be non-prorated. The Contractor shall provide a warranty to the Owner that covers defects in the installation workmanship, and further warrant that the installation was done in accordance with both the manufacturer's recommendations and any written directives of the manufacturer's representative. Prior to final payment for the synthetic turf, the Contractor shall submit to owner notification in writing that the field is officially added to the annual policy coverage, guaranteeing the warranty to the Owner. The insurance policy must be underwritten by an "AM Best" A rated carrier and must reflect the following values:

- Pre-Paid 10-year insured warranty from a single source.
- Maximum per claim coverage amount of $15,000,000.
- Minimum of fifteen million dollars ($15,000,000) annual.

- Must cover full 100% replacement value of total square footage installed, minimum of $7.00 per sq ft. (in case of complete product failure, which will include removal and disposal of the existing surface)
- Provide a sample copy of insured, non-prorated warranty and insurance policy information.
- Policy cannot include any form of deductible to be paid by the Owner.

C. The artificial grass system must maintain a G-max of less than 200 for the life of the Warranty as per ASTM F1936.

1.9 MAINTENANCE SERVICE

A. Contractor shall train the Owner's facility maintenance staff in the use of the turf manufacturer's recommended maintenance equipment.

B. Manufacturer must provide maintenance guidelines and a maintenance video to the facility maintenance staff.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURER

A. Approved manufacturers are as follows:

1. FieldTurf USA Inc.
   175 N. Industrial Blvd
   Calhoun, GA 30701
   P: 800-724-2969 **(OR PRE-APPROVED EQUAL)**

Model or "Basis of Design": FieldTurf Classic HD 2.5" (BASE BID) + Cooling Composite (ADD ALTERNATE #1)

2.2 MATERIALS AND PRODUCTS

A. Artificial grass FieldTurf system materials shall consist of the following:
   1. Carpet made of slit-film polyethylene fibers tufted into a fibrous, non-perforated, porous backing.
   2. Infill: graded sand and cryogenic rubber crumb and an extruded cooling composite particle that partially covers the carpet.
   3. Glue, thread, paint, seaming fabric and other materials used to install and mark the artificial grass slit-film FieldTurf.

B. The installed artificial grass slit-film FieldTurf shall have the following properties:

Standard	Property	Specification
ASTM D1907	Fiber Denier	10,800
ASTM D5823	Min. Pile Height	2 ½"
ASTM D3218	Fiber Thickness	130 Microns
ASTM D5793	Stitch Gauge	3/4"
ASTM D5848	Pile Weight	36oz/square yard

ASTM D5848	Primary Backing	7+oz/square yard
ASTM D5848	Secondary Backing	14+oz/square yard
ASTM D5848	Total Weight	57+oz/square yard
ASTM D1335	Tuft Bind (Without Infill)	8+ lbs
ASTM D5034	Grab Tear (Width)	200 lbs/force
ASTM D5034	Grab Tear (Length)	200 lbs/force
ASTM F1551	Carpet Permeability	>40 inches/hour
ASTM F1936	Impact Attenuation (Gmax)	<200
	Min. Infill Material Depth	1.75 inches
	Min. Extruded Cooling Composite	0.6lbs/square foot
	Min. Sand Infill	6.2lbs/square foot
	Min. Cryogenic Rubber Infill	2.4lbs/square foot
	Total Product Weight	1382oz/square yard

Variation of +/- 5% on above listed properties is within normal manufacturing tolerances

C. Carpet shall consist of slit-film fibers tufted into a primary backing with a secondary backing.

D. Carpet Rolls shall be 15' wide rolls.
   1. Rolls shall be long enough to go from field sideline to sideline.
   2. Where the playing field is for football, the perimeter white line shall be tufted into the individual sideline rolls.

E. Backing:
   1. Primary backing shall be a minimum double-layered polypropylene fabric
   2. Secondary backing shall permanently lock the fiber tufts in place.
   3. Perforated (with punched holes), backed carpet are unacceptable.

F. Fiber shall be measuring no less than 2 ½ inches high.
   1. Systems with less than a 2 ½ inch fibers are unacceptable.

G. Infill materials shall be approved by the manufacturer.
   1. Infill shall consist of a resilient layered granular system, comprising selected and graded sand, cryogenically hammer-milled SBR rubber crumb and an extruded cooling composite.
   2. Artificial Grass products without cryogenically processed SBR rubber and a top layer of the extruded cooling composite will not be acceptable.
   3. Coated infill and infill needing to be watered to activate their cooling properties are unacceptable.
   4. The extruded cooling composite must have a bulk density of 0.55 g/cm3 +/- 15% and a specific gravity of greater than 1.
   5. Organic infill material is unacceptable.

H. The sand infill will comply within the following characteristics:

   - Average Particle size between 20 and 30 mesh [calculated based on summing the midpoint of sieve pan fractions times the % retained on given screen fractions]
   - Average Particle shape > 0.4 on the Krumbein scale
   - Particle structure predominantly single grain

- Produce < 0.4%, -50M in API crush test at 80psig

I. Thread for sewing seams of turf shall be as recommended by the synthetic turf manufacturer.

J. Glue and seaming fabric for inlaying lines and markings shall be as recommended by the synthetic turf manufacturer.

K. Turf Sample, Backing Sample & Infill Sample showing ALL Materials & Products outlined in this section shall be submitted to project Landscape Architect 10 calendar days before the bid opening.

2.3 QUALITY CONTROL IN MANUFACTURING

A. The manufacturer shall own and operate its own manufacturing plant. Manufacturing the fiber, tufting of the field fibers into the backing materials and coating of the turf system must be done in-house by the turf manufacturer. Outsourcing of any of these major processes is unacceptable.

B. The manufacturer shall have full-time certified in-house inspectors at their manufacturing plant that are experts with industry standards.

C. Primary backing shall be inspected by the manufacturer's full-time certified in-house inspectors before tufting begins.

D. The manufacturer's full-time in-house certified inspectors shall verify "pick count", yarn density in relation to the backing, to ensure the accurate amount of face yarn per square inch.

E. The manufacturer's full-time, in-house, certified inspectors shall perform turf inspections at all levels of production including during the tufting process and at the final stages before the turf is loaded onto the truck for delivery.

F. The manufacturer shall have its own, in-house laboratory where samples of turf are retained and analyzed, based on standard industry tests, performed by full-time, in-house, certified inspectors.

G. The manufacturer must have ISO 9001, ISO 14001 and OHSAS 18001 certifications demonstrating its manufacturing efficiency with regards to quality, environment and safety management systems.

2.4 FIELD GROOMER & SWEEPER

Supply field groomer as part of the work.

1. Field Groomer and Sweeper shall include towing attachments compatible with a field utility vehicle.
2. Field Groomer shall be a FieldTurf GroomRight **(OR APPROVED EQUAL).** Submittal required during construction.
3. Field Sweeper shall be a FieldTurf FieldSweep **(OR APPROVED EQUAL).** Submittal required during construction.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that all sub-base leveling is complete prior to installation.

B. Installer shall examine the surface to receive the synthetic turf and accept the sub-base planarity in writing prior to the beginning of installation.
   1. Acceptance is dependent upon the Owner's test results indicating compaction and planarity are compliant with manufacturer's specifications.
   2. The surface shall be accepted by Installer as "clean" as installation commences and shall be maintained in that condition throughout the process.

C. Compaction of the aggregate base shall be 95%, in accordance with ASTM D1557 (Modified Proctor procedure); and the surface tolerance shall not exceed 0-1/4 inch over 10 feet and 0-½" from design grade.

D. Correct conditions detrimental to timely and proper completion of Work.

E. Do not proceed until unsatisfactory conditions are corrected.

F. Beginning of installation means acceptance of existing conditions.

3.2 PREPARATION

A. Prior to the beginning of installation, inspect the sub-base for tolerance to grade.

B. Sub-base acceptance shall be subject to receipt of test results (by others) for compaction and planarity that sub-base is compliant with manufacturer's specifications and recommendations.

C. Dimensions of the field and locations for markings shall be measured by a registered surveyor to verify conformity to the specifications and applicable standards. A record of the finished field as-built measurements shall be made.

D. When requested by Landscape Architect, installed sub-base shall be tested for porosity prior to the installation of the slit-film turf. A sub-base that drains poorly is an unacceptable substrate

3.3 INSTALLATION - GENERAL

A. The installation shall be performed in full compliance with approved Shop Drawings.

B. Only trained technicians, skilled in the installation of athletic caliber synthetic turf systems working under the direct supervision of the approved installer supervisors, shall undertake any cutting, sewing, gluing, shearing, top-dressing or brushing operations.

C. The designated Supervisory personnel on the project must be certified, in writing by the turf manufacturer, as competent in the installation of this material, including sewing seams and proper installation of the Infill mixture.

D. Designs, markings, layouts, and materials shall conform to all currently applicable National Collegiate Athletic Association rules, and/or other rules or standards that may apply to this type of synthetic grass installation. Designs, markings and layouts shall first be approved by the Landscape Architect or Owner in the form of final shop drawings. All markings will be

in full compliance with final shop drawings.

3.4 INSTALLATION

A. Install at location(s) indicated, to comply with final shop drawings, manufacturers'/installer's instructions.

B. The Contractor shall strictly adhere to specified procedures. Any variance from these requirements shall be provided in writing, by the manufacturer's on-site representative, and submitted to the Landscape Architect, verifying that the changes do not in any way affect the Warranty. Infill materials shall be approved by the manufacturer and installed in accordance with the manufacturer's standard procedures.

C. Carpet rolls shall be installed directly over the properly prepared aggregate base. Extreme care shall be taken to avoid disturbing the aggregate base in regard to compaction and planarity.
   1. Repair and properly compact any disturbed areas of the aggregate base as recommended by manufacturer

D. Full width rolls shall be laid out across the field.
   1. Turf shall be of sufficient length to permit full cross-field installation from sideline to sideline.
   2. Each roll shall be attached to the next roll utilizing standard state-of-the- art sewing procedures.
   3. When all the rolls of the playing surface have been installed, the sideline areas shall be installed at right angles to the playing surface.

E. Artificial turf panel seams shall be sewn along the selvedge edging flap of the turf roll. Seams secured by other means including gluing are unacceptable. Installation shall be 99% sewn.
   1. Minimum gluing will only be permitted to repair problem areas, corner completions, and to cut in any logos or inlaid lines as required by the specifications.
   2. Seams shall be flat, tight, and permanent with no separation or fraying.
   3. In the case of all lines and logos, turf carpet/field fibers must be sheared to the backing (do not cut the backing) and adhered using hot melt adhesives.

F. Infill Materials:
   1. Infill materials shall be applied in numerous thin lifts. The turf shall be brushed as the mixture is applied.
   2. Infill materials shall be installed to fill the voids between the fibers and allow the fibers to remain vertical and non-directional. The Infill installation consists of sand, cryogenically processed rubber and an extruded cooling composite. The Infill shall be installed to a minimum depth of 1 3/4".

G. Synthetic turf shall be attached to the perimeter edge detail in accordance with the manufacturer's standard procedures.

H. Upon completion of installation, the finished field shall be inspected by the installation crew and an installation supervisor.

3.5 FIELD MARKINGS

A. Field markings shall be installed in accordance with approved shop drawings. All five-yard lines will be tufted-in.

B. Balance of sports markings will be inlaid in accordance with the Drawings.

C. Center field logo shall be inlaid according to artwork indicated on Drawings and in accordance with manufacturer's standard palette of turf colors.

D. End-zone letters and logos shall be inlaid according to artwork and fonts indicated on the Drawings, and in accordance with manufacturer's standard palette of turf colors.

3.6 ADJUSTMENT AND CLEANING

A. Do not permit traffic over unprotected surface.

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

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

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

E. Surfaces, recesses, enclosures, and related spaces shall be cleaned as necessary to leave the work area in a clean, immaculate condition ready for immediate occupancy and use by the Owner.

3.7 PROTECTION

A. Protect installation throughout construction process until date of final completion.

GENERAL NOTES

1. THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2017 EDITION, AS AMENDED, SHALL BE THE STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF THIS PROJECT UNLESS OTHERWISE INDICATED OR AMENDED IN THE SPECIAL PROVISIONS, PROPOSAL AND CONTRACT DOCUMENTS.

2. EXISTING UNDERGROUND UTILITY LINES ARE SHOWN ON THE DRAWINGS BASED UPON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE ENGINEER CANNOT AND DOES NOT WARRANT THAT THIS INFORMATION IS COMPLETE OR ACCURATE. THE CONTRACTOR MUST COORDINATE DIRECTLY WITH THE INVOLVED UTILITY OWNERS TO HAVE UNDERGROUND UTILITY LINES FIELD LOCATED IN ADVANCE OF CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL NOTIFY THE USM PHYSICAL PLANT AT LEAST TWO WEEKS IN ADVANCE OF WORK WITHIN EACH AREA SO THAT USM UTILITIES CAN BE FIELD LOCATED. USM UTILITIES SHALL BE FIELD LOCATED BASED ON THEIR KNOWLEDGE. ALL DAMAGES TO EXISTING UTILITIES WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING STRUCTURES SUCH AS PIPES, INLETS, APRONS, IRRIGATION, ETC. FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. THE CONTRACTOR SHALL REPLACE OR REPAIR, AS DIRECTED BY THE ENGINEER, ANY STRUCTURES DAMAGED DURING THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.

4. THE CONTRACTOR SHALL AVOID DAMAGING TREES AND SHRUBBERY UNLESS NOTED IN THE PLANS TO BE REMOVED. ALL DAMAGED PLANT MATERIAL NOT NOTED TO BE REMOVED SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

5. IMPROVEMENTS SHOWN ON THESE PLANS ARE IN APPROXIMATE LOCATIONS. ALL IMPROVEMENTS SHALL BE FIELD LOCATED BY THE CONTRACTOR WITH FIELD STAKED LOCATIONS APPROVED BY THE ENGINEER TO VERIFY PROPER PLACEMENT, ETC. THE CONTRACTOR SHALL FIELD STAKE PROPOSED IMPROVEMENT LOCATIONS A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO REVIEW BY THE ENGINEER.

6. ALL SIGNS AND TRAFFIC CONTROL DEVICES USED ON THIS PROJECT SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION).

7. WORK ON STRUCTURES FOR THIS PROJECT REQUIRES EXCAVATION IN THE IMMEDIATE VICINITY OF TRAFFIC AND ADJACENT PROPERTIES, THEREFORE THE RISK OF A FAILURE OCCURRING DURING EXCAVATION REQUIRES THAT EXTREME CAUTION BE EXERCISED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE BRACING, SHORING, GROUND SUPPORT SYSTEMS OR WHAT IS DEEMED NECESSARY TO PREVENT A FAILURE AND PROTECT PERSONS WORKING NEAR THE EXCAVATION.

8. NO PAYMENT WILL BE MADE FOR DISPOSING OF UNUSED OR REMOVED MATERIALS. CONTRACTOR SHALL DISPOSE OF UNUSED OR REMOVED MATERIALS ONLY IN AN APPROVED LANDFILL. BEFORE DISPOSAL, AND BEFORE DEMOLITION ACTIVITIES BEGIN, CONTRACTOR SHALL SUBMIT THE NAME AND LOCATION OF LANDFILL FOR THE APPROVAL OF THE OWNER AND PROJECT LANDSCAPE ARCHITECT. (COST ABSORBED)

9. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING RESTROOM FACILITIES FOR WORKMEN THROUGHOUT CONSTRUCTION. LOCATION SHALL BE APPROVED BY THE OWNER'S PROJECT REPRESENTATIVE.

10. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING GRADES AND MAKING ADJUSTMENTS AS NECESSARY WITH THE APPROVAL OF THE PROJECT ENGINEER.

11. THE CONTRACTOR SHALL COORDINATE WITH THE RESPECTIVE UTILITY COMPANIES FOR LOCATION OF EXISTING POWER, TELEPHONE, AND CABLE TV UTILITIES. DEPTH OF UNDERGROUND UTILITIES IS NOT KNOWN. THE CONTRACTOR IS REQUIRED TO DO TEST EXCAVATIONS IN AREAS WITH POTENTIAL CONFLICTS TO DETERMINE DEPTH OF UNDERGROUND UTILITIES.

12. THE CONSTRUCTION SITE SHALL BE PROPERLY MAINTAINED. THIS INCLUDES REMOVAL OF DEBRIS AT THE END OF EACH WORK DAY AND MINIMIZING DISTURBED AREA.

13. AN AREA FOR THE STORAGE OF CONSTRUCTION MATERIALS, EQUIPMENT AND EMPLOYEE PARKING (LAYDOWN YARD) WILL BE PROVIDED BY USM. TEMPORARY LANE CLOSURES ARE AVAILABLE FOR THE DROP-OFF OF MATERIALS AND CONSTRUCTION ACTIVITIES.

14. THE CONTRACTOR MAY BE REQUIRED TO STOP WORK AND BE OFF CAMPUS FOR CAMPUS EVENTS AS DEEMED NECESSARY BY USM. THE CONTRACTOR SHALL BE NOTIFIED OF SUCH EVENTS DURING THE PRE CONSTRUCTION MEETING, OR RECEIVE 2 WEEKS PRIOR NOTICE OF SUCH EVENTS.

15. ANY AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR (TO INCLUDE TRACK, GRASSING, SIDEWALKS, DRIVEWAYS, CURBS, PARKING AREAS, PAVEMENT, SITE GRADING AND ANY OTHER AREAS ASSOCIATED WITH THE WORK) AS DIRECTED BY THE ENGINEER, USM PROJECT REPRESENTATIVE, AND SUPERINTENDENT OF GROUNDS. THIS INCLUDES AREAS DAMAGED OR DISTURBED BY THE CONTRACTOR'S VEHICLES OR EQUIPMENT OUTSIDE OF THE PROJECT AREA. CONTRACTOR SHALL PROVIDE TEMPORARY EROSION CONTROL FOR DISTURBED AREAS UNTIL THEY HAVE BEEN GRASSED AND GROWTH ESTABLISHED. NOT A SEPARATE PAY ITEM. COST TO BE ABSORBED IN OTHER ITEMS.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE BEHAVIOR OF ALL REPRESENTATIVES OF HIS COMPANY INCLUDING HIS EMPLOYEES AND SUBCONTRACTORS. THE FOLLOWING WILL BE PROHIBITED ACTIVITIES DURING CONSTRUCTION: LOUD MUSIC, TALKING TO STUDENTS OR FACULTY, PROFANE LANGUAGE AND ANY AND ALL OTHER TYPES OF BEHAVIOR THAT MIGHT BE OFFENSIVE. ANY EMPLOYEE FOUND IN VIOLATION OF THIS REQUIREMENT WILL BE REMOVED IMMEDIATELY UPON REQUEST OF THE PROJECT ENGINEER OR USM.

17. EXCEPT AS NOTED BELOW, CONTRACTOR SHALL REMOVE FROM THE SITE AND SATISFACTORILY DISPOSE OF ALL TREES, SHRUBS, STUMPS, ROOTS, BRUSH, MASONRY, RUBBISH, SCRAP, DEBRIS, AND MISCELLANEOUS OTHER STRUCTURES NOT COVERED UNDER OTHER SECTIONS AS SHOWN, SPECIFIED OR OTHERWISE REQUIRED TO PERMIT CONSTRUCTION OF THE NEW WORK.

18. TREES, STUMPS AND OTHER CLEARED AND GRUBBED MATERIAL MAY NOT BE DISPOSED ON SITE.

19. BURNING WILL NOT BE ALLOWED ON SITE.

20. CONTROL AIR POLLUTION CAUSED BY DUST AND DIRT, AND COMPLY WITH GOVERNING REGULATIONS.

21. ALL TREES ARE TO REMAIN UNLESS OTHERWISE NOTED.

22. ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES, INCLUDING BUT NOT LIMITED TO, THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.

INDEX TO DRAWINGS

TOTAL NUMBER OF SHEETS (11)

NOTICE TO DRAWING HOLDER

NEEL-SCHAFFER, INC., HEREINAFTER REFERRED TO AS THE ENGINEER HAS PREPARED AND FURNISHED THIS DRAWING TO THE OWNER FOR USE ON THIS PROJECT ONLY. THIS DRAWING SHOULD NOT BE USED ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT. ANY REUSE OF THIS DRAWING, WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY THE ENGINEER, SHALL BE AT THE REUSER'S SOLE RISK AND THE REUSER SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING THEREFROM.

REVISIONS				DRAWING INFORMATION	
NO.	DATE	BY	DESCRIPTION	N-S PROJECT NO.: 17589.000	
1	3/14/23	DAL	NOTE REVISED PER ADDENDUM NO. 1	FILENAME: 17589_Notes (ADD#1).dwg	
				SCALE: NTS	
				SURVEYED BY: NA	
				DSGN: DAL	DATE: 2/2023
				DRWN: DAL	DATE: 2/2023
				CHKD: DAL	DATE: 3/2023
				QA/QC: RPB	DATE: 3/2023

SYNTHETIC TURF REPLACEMENT
CARLISLE-FAULKNER FIELD at M.M ROBERTS STADIUM

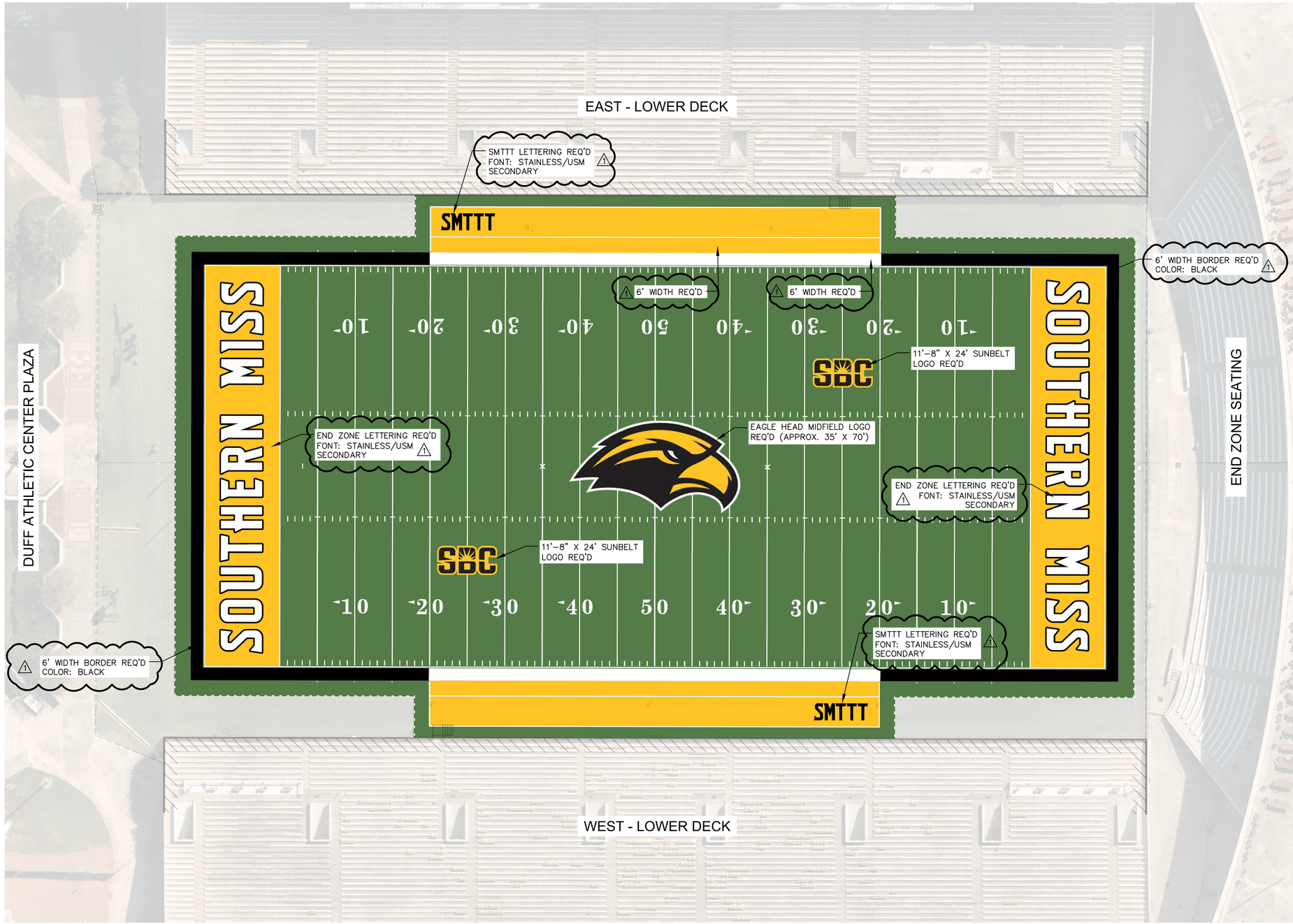
UNIVERSITY OF SOUTHERN MISSISSIPPI
HATTIESBURG, MISSISSIPPI
FORREST COUNTY

NEEL-SCHAFFER
Solutions you can build upon

INDEX & GENERAL NOTES

WORKING NUMBER: GN-1

DRAWING NUMBER: 2



NOTES:

1. LOGO: DIGITAL FILE AVAILABLE UPON REQUEST. SUBMITTAL IS REQUIRED AND SHALL BE APPROVED BY PROJECT LANDSCAPE ARCHITECT.
2. CONTRACTOR TO PROVIDE A FIELD MARKING, FIELD TEXT, LOGO, END ZONE, & TURF COLOR SUBMITTAL TO BE APPROVED BY OWNER & PROJECT LANDSCAPE ARCHITECT. THE COLORS SHOWN IN THIS SET OF PLANS ARE APPROXIMATE, AND ARE ONLY SHOWN FOR REPRESENTATION PURPOSES.
3. SYNTHETIC TURF SYSTEM – FOOTBALL FIELD AREA (SEE SPECIAL PROVISION 907-242-1 SYNTHETIC TURF SYSTEM FOR MORE REQUIREMENTS)

   SYNTHETIC TURF SYSTEM– FIELD TURF CLASSIC HD 2.5", (OR APPROVED EQUAL)
   FIBER– SLIT FILM/ FTHD-1, NO LESS THAN 2½"" HEIGHT, TUFTED INTO PRIMARY BACKING WITH SECONDARY BACKING
   INFILL– GRADED SAND & CRYOGENIC RUBBER CRUMB
   FIBER DENIER– 10,800
   MIN. PILE HEIGHT– 2½""
   FIBER THICKNESS– 130 MICRONS
   STITCH GUAGE– ⅜"
   PILE WEIGHT – 36 OZ/SY
   BACKING– NON-PERFORATED, POROUS (PUNCHED HOLES NOT ALLOWED)
   PRIMARY BACKING– MIN. DOUBLE LAYERED POLY FABRIC (7+ OZ/SY)
   SECONDARY BACKING– SHALL PERMANENTLY LOCK FIBER TUFTS IN PLACE (14+ OZ/SY)
   TOTAL WEIGHT– 57+ OZ/SY
   TUFT BIND W/O INFILL– 8+ LBS
   GRAB TEAR WIDTH– 200 LBS/FORCE
   GRAB TEAR LENGTH– 200 LBS/FORCE
   CARPET PERMEABILITY– >40 INCHES/HOUR
   IMPACT ATTENUATION (GMAX)– <200
   MIN. INFILL MATERIAL DEPTH– 1.75"
   MIN. EXTRUDED COOLING COMPOSITE– 0.6 LBS/SF
   MIN. SAND INFILL– 6.2 LBS/SF
   MIN. CRYOGENIC RUBBER INFILL– 2.4 LBS/SF
   TOTAL PRODUCT WEIGHT– 1382 OZ/SY
   FIELD COLORS– FIELD GREEN (FT GREEN PANTONE)
   LOGO & ENDZONE COLOR #1 – MUSTARD (PANTONE 124C)
   LOGO & ENDZONE COLOR #2 – BLACK (PANTONE BLACK)
   LOGO & ENDZONE COLOR #3 – WHITE (STANDARD)
   WARRANTY – 10 YEAR
4. THE CONTRACTOR IS REQUIRED TO LEAVE THE OWNER WITH "ATTIC STOCK" OF 500 LBS OF BOTH SAND AND RUBBER MATERIAL USED AS INFILL FOR FUTURE (IN HOUSE) REPAIRS TO THE FIELD. THIS ALSO APPLIES TO THE COOLING INFILL TECHNOLOGY IF ADD ALTERNATE #1 IS ACCEPTED. (COST ABSORBED)
5. THE CONTRACTOR IS REQUIRED TO REFERENCE THE "SUN BELT CONFERENCE 2022 BRAND STANDARDS – FALL EDITION" FOR SUN BELT LOGO PLACEMENT AND COLOR SCHEME. THE SOUTHERN MISS SCHOOL SPECIFIC "TWO COLOR LOGO" REQUIREMENTS ARE SHOWN ON PAGE 29 OF THE MANUAL. PLAYING SURFACE LOGO PLACEMENTS FOR FOOTBALL FIELDS ARE SHOWN ON PAGE 49 OF THE MANUAL. ALL REQUIREMENTS FOR THE SUN BELT LOGO SHOWN ON THESE TWO PAGES MUST BE FOLLOWED. COST ABSORBED
6. AN ELECTRONIC COPY OF "SUN BELT CONFERENCE 2022 BRAND STANDARD" MANUALS ARE AVAILABLE UPON CONTRACTOR REQUEST AT NO ADDITIONAL COST. (PRE AND POST BID OPENING)

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20 feet

REVISIONS			
NO.	DATE	BY	DESCRIPTION
①	3/14/23	DAL	NOTES & CALLOUTS REVISED PER ADDENDUM NO. 1

DRAWING INFORMATION	
N-S PROJECT NO.: 17589.000	
FILENAME: 17589_MASTER (ADD #1).dwg	
SCALE: 1"=20'	
SURVEYED BY: NA	
DSGN: DAL	DATE: 2/2023
DRWN: DAL	DATE: 2/2023
CHKD: DAL	DATE: 3/2023
QA/QC: RPB	DATE: 3/2023

SYNTHETIC TURF REPLACEMENT
CARLISLE-FAULKNER FIELD at M.M ROBERTS STADIUM

UNIVERSITY OF SOUTHERN MISSISSIPPI
HATTIESBURG, MISSISSIPPI
FORREST COUNTY

NEEL-SCHAFFER
Solutions you can build upon

SITE PLAN - FIELD MARKING & LOGOS

WORKING NUMBER:	DRAWING NUMBER:
PLN-3	7