



ADDENDUM No. 4

Project: 2018 Athletic Improvement Project
Brownstown Central High School

Brownstown, Indiana

Proj. No: 1741.01

Date: February 28, 2018

This addendum is a part of the bid documents. Acknowledge receipt on the Proposal Form.

General

1. Notify Matt Gullo of any questions regarding bidding at phone (812-913-4616) or email (matt.gullo@koverthawkins.com).

Specifications

Specification Section 02791 (Artificial Turf Shock Pad)

- Section 1.03 – Revise as follows
Note “D” – Delete in its entirety.
Add the following ASTM Standards to Section 1.03
 - D. ASTM F355-16 (missile E) -- Standard Test Method for Impact Attenuation of Playing Surface Systems, Other Protective Sport Systems, and Materials Used for Athletics, Recreation and Play
 - E. ASTM F355-16 (missile A) -- Standard Test Method for Impact Attenuation of Playing Surface Systems, Other Protective Sport Systems, and Materials Used for Athletics, Recreation and Play
 - F. ASTM F3189-17 – Standard test method for Measuring Force Reduction, Vertical Deformation, and Energy Restitution of Synthetic Turf Systems Using the Advanced Artificial Athlete
- Section 1.04 – Add the following
 4. Submit all applicable test data for compliance to specifications. All testing to be performed following applicable ASTM or other internationally recognized standards and procedures.
 5. Bidding contractor must identify performance base system with bid package. If a non-specified product is identified, the proposed alternate product must be submitted and pre-approved by the design architect/engineer 10 days prior to the bid opening. If bidding contractor does not identify a manufacturer, the Township/School District will assume that the specified product is included in the bid package and will not consider substitutions.
- Section 1.06 – Add the following
 - D. Product must be of consistent material composition. Variable content material will not be accepted.
 - E. Manufacturer must provide documentation of material content and pre-approved standard OSHA MSDS sheet.
 - F. Manufacturer must demonstrate successful athletic field installation in the United States of at least 40 million square feet (approx. 500 fields) over a minimum period of 5 years.
 - G. Material must be covered by a pre-approved and binding 16-year limited product and performance warranty issue by a company in the United States of America. Warranty shall include the provision that manufacturer will deliver to the Owner and install new panels to replace the non-conforming panels. The installation shall include the temporary removal and repair or replacement of the artificial turf and infill over the affected area.
 - H. Warranty must specify static and dynamic load limits in pounds and pounds per square inch. Warranty must not specify monetary limits of liability. Warranty must allow owner a notice period of at least 30 days for non-compliance claims.



- I. Warranty must include guarantee for surface system $G_{max} \leq 135$ G's according to ASTM F1936-10 for warranty period of artificial turf.
- J. System seams should be mechanically locked into place by hand without cutting, splicing, use of additional materials, glue, fasteners, or secondary processes and equipment.
- K. Prior to installation, manufacturer must provide an endorsed certificate as proof of at least \$1,000,000 product liability insurance stipulated in the United States of America with field owner named as the certificate holder. The insurance certificate must specify the name and address of the field facility at which the specified product will be installed.
- Part I (General) – Add the following
 - 1.07 **ENVIRONMENTAL COMPATIBILITY**
 - A. Material must be manufactured in an ISO 14001:2004 certified facility.
 - B. Product must not contain concentrations of metals, volatile organic compounds (VOCs), or semi-volatile organic compounds (SVOCs) at concentrations greater than EPA Regional Screening Levels or Department of Toxic Substances Control Human Health Risk Assessment (HHRA) Note 3 thresholds. (EPA 60108, EPA 7470A EPA 7471A, EPA 8260B, EPA 8270C).
 - Section 2.01.B – Replace entirely with the following standards
 - B. General Requirements – An impact energy absorbing sub-base drainage system designed specifically for use with synthetic turf is required. The specified material must have physical, drainage and performance properties that meet or exceed the following requirements (material only):
 - 1. Minimum material nominal thickness 14mm – material thickness must be within +/- 1.5mm
 - 2. Tensile Strength >45 psi (ASTM D3574-08 Test E)
 - 3. Tensile Elongation >10% (ASTM D3574-08 Test E)
 - 4. Compression Strength >25psi @ 25% strain (ASTM 3575-08 Test D)
 - 5. Linear Thermal Expansion < 0.10 mm /m /° C (ASTM D696)
 - 6. Water Absorption <=1% after 24 hrs (ISO 62:2008 / DIN 52 438)
 - 7. Water Permeability >500"/hr (ASTM 1551 DIN 18-035, Part 6)
 - 8. Head Injury Criterion <1,000 from >0.5m drop height (ASTM F355-16, E)
 - 9. $G_{max} < 160$ G's (ASTM 355-16 Missile A)
 - 10. Shock Absorption >50% (ASTM 3189-17)
 - 11. Vertical Deformation <5.0mm (ASTM 3189-17)

Specification Section 07420 (Composite Metal Panel)

- Section 2.01 – add the following acceptable manufacturer
 - 7. "Citadel Architectural Products, Inc."; Envelope 2000 RV.

Drawings

Drawing Original Survey

- For reference of all existing elevations, the original survey has been included to assist in grading cut/fill take-offs. See attached survey.



Prepared by,

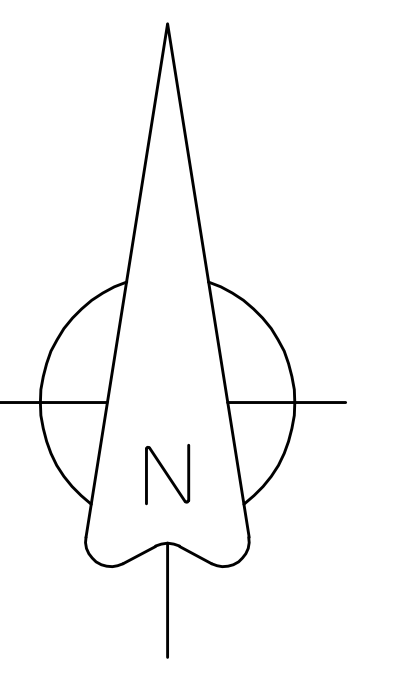
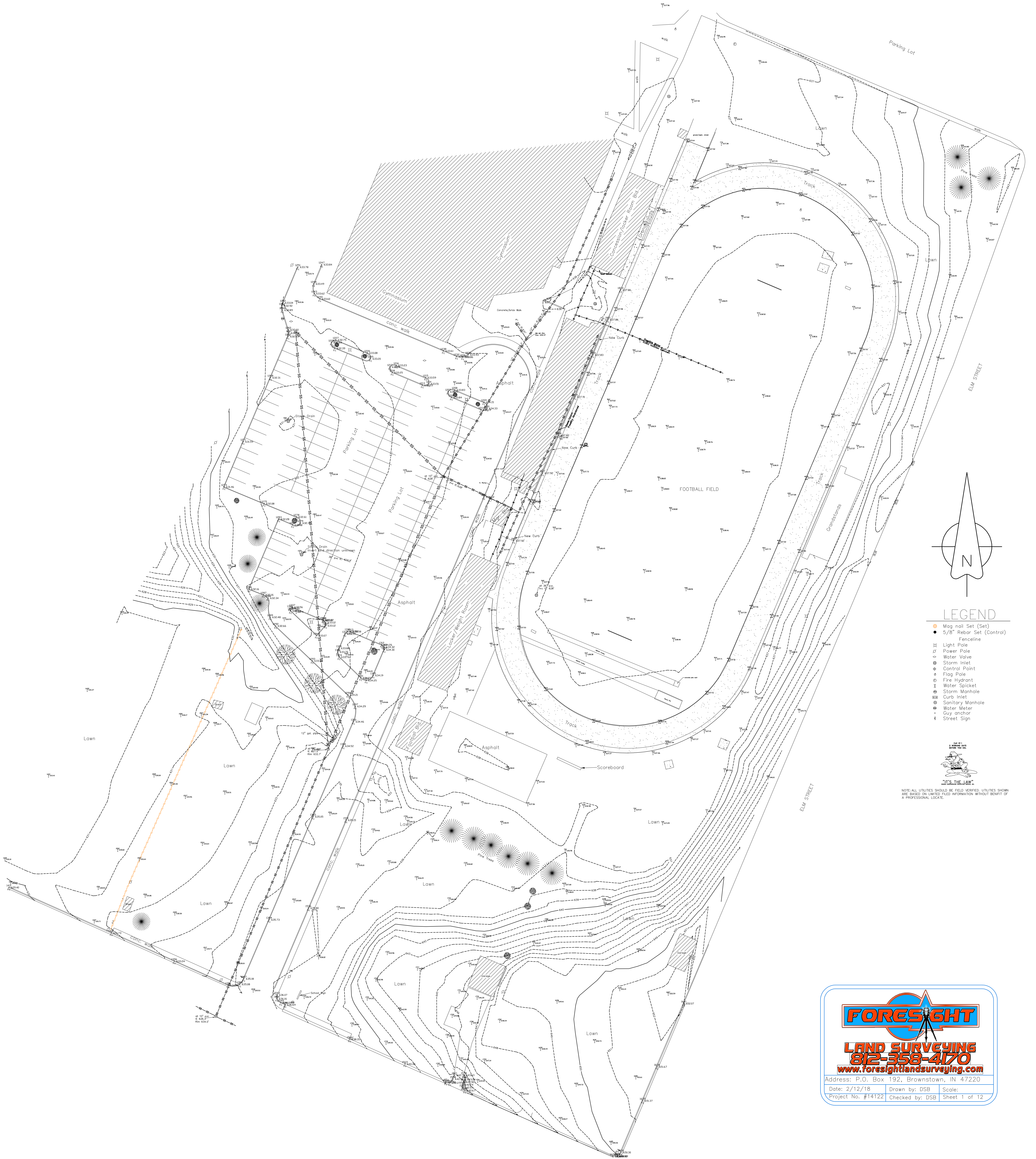
Matthew D. Gullo, RLA
Director of Landscape Architecture and Planning

enclosed: none

file: 1727.01

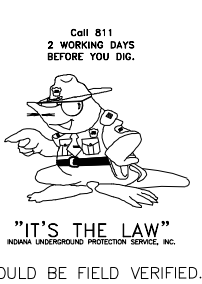
End of Addendum No. 4





LEGEND

- Mag nail Set (Set)
- 5/8" Rebar Set (Control)
- Fence Line
- ⊕ Light Pole
- ⊕ Power Pole
- ⊕ Water Valve
- ⊕ Storm Inlet
- ⊕ Control Point
- ⊕ Flag Pole
- ⊕ Fire Hydrant
- ⊕ Water Spicket
- ⊕ Storm Manhole
- ⊕ Curb Inlet
- ⊕ Sanitary Manhole
- ⊕ Water Meter
- ⊕ Guy anchor
- ⊕ Street Sign



NOTE: ALL UTILITIES SHOULD BE FIELD VERIFIED. UTILITIES SHOWN ARE BASED ON LIMITED FIELD INFORMATION WITHOUT BENEFIT OF A PROFESSIONAL LOCATE.

FORESIGHT

LAND SURVEYING
812-358-4170
www.foresightlandsurveying.com

Address: P.O. Box 192, Brownstown, IN 47220	Date: 2/12/18	Drawn by: DSB	Scale:
Project No. #14122	Checked by: DSB	Sheet 1 of 12	