STATEMENT OF PURPOSE & BACKGROUND

• **Scope:**
  - Furnishing and installing a synthetic turf system, including acceptance of prepared sub-base and drainage system; turf carpet, infill and shock pad; coordination with related trades.

• **Statement of goals:**
  - Provide a high quality product and system that is functional, aesthetic and:
    - Is durable.
    - Is easily maintained per manufacturer’s instructions.

• **Revision history of section:**
  - 04/18/18 (date of adoption)
  - 01/14/21

• **The installed system shall have the following minimum properties:**

SELECTION AND APPLICATION CRITERIA

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber Denier</td>
<td>9,000+</td>
<td>ASTM D1577</td>
</tr>
<tr>
<td>Tape Thickness</td>
<td>200 Microns</td>
<td>ASTM D3218</td>
</tr>
<tr>
<td><strong>Pile Height</strong></td>
<td>2.0”</td>
<td>ASTM D5823</td>
</tr>
<tr>
<td>Stitch Gauge</td>
<td>3/8” – ¾”</td>
<td>ASTM D5793</td>
</tr>
<tr>
<td>Pile Weight</td>
<td>35 oz/square yard</td>
<td>ASTM D5848</td>
</tr>
<tr>
<td>Primary Backing</td>
<td>7 oz/square yard</td>
<td>ASTM D5848</td>
</tr>
<tr>
<td>Secondary Backing</td>
<td>16+ oz/square yard</td>
<td>ASTM D5848</td>
</tr>
<tr>
<td>Total Weight</td>
<td>57 oz/square yard</td>
<td>ASTM D5848</td>
</tr>
<tr>
<td>Tuft Bind (without infill)</td>
<td>8+ lbs</td>
<td>ASTM D1335</td>
</tr>
<tr>
<td>Grab Tear (width and length)</td>
<td>Min. 200 lbs/force</td>
<td>ASTM D5034</td>
</tr>
<tr>
<td>Impact Attenuation (Gmax)</td>
<td>Max. 165</td>
<td>ASTM F1936</td>
</tr>
<tr>
<td>Carpet Permeability</td>
<td>Min. 40 inches/hour</td>
<td>ASTM D4491</td>
</tr>
<tr>
<td>Infill Material Depth (Sand &amp; TPE)</td>
<td>1.25 inches</td>
<td></td>
</tr>
<tr>
<td>Exposed Blade Height</td>
<td>.75”</td>
<td></td>
</tr>
<tr>
<td>Shock Pad Depth</td>
<td>.63” (16 mm)</td>
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</tr>
<tr>
<td>Sand Infill Component</td>
<td>4 lbs/square foot</td>
<td></td>
</tr>
<tr>
<td>SBR Rubber Infill Component</td>
<td>Not Allowed</td>
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</tr>
<tr>
<td>Total Product Weight</td>
<td>1,066 oz/square yard</td>
<td></td>
</tr>
</tbody>
</table>
OUTLINE SPECIFICATION

• Part 1 General
  o Provide consistent, high quality products that:
    ▪ Conform to all applicable codes and standards for synthetic turf systems.
    ▪ Complies with testing standards specified herein.

• Part 2 Products
  o Synthetic Turf System:
    ▪ **Acceptable Manufacturers are limited to the following:**
      • FieldTurf USA; Model: FieldTurf Vertex (3/4 gauge)
      • AstroTurf, LLC; Model: AstroPlay 3D (3/4 gauge)
      • Sprinturf, LLC; Model: Dual Yarn (3/4 gauge)
    ▪ All products above to have 2” long Fibers of Monofilament and Slit Film.
    ▪ No additional manufacturers will be considered.
    ▪ Synthetic Turf System shall consist of:
      • Synthetic grass carpet (turf) of 50% monofilament polyethylene and 50% slit-film fibers tufted into a primary backing with a secondary backing, fully permeable (no exceptions).
      • Infill: Graded silica sand and TPE that partially covers the turf.
      • Technical Layer (Shock pad): Interlocking shock pad under turf, PEX foam, directly on granular sub-grade.
      • Acceptable manufacturers of shock pad:
        o Schmitz Foam Products
        o En-Plast Technology, LLC
        o Brock International
      • Thread, paint, seaming fabric and other materials used to install and mark the turf.
      • Sub-surface granular material and drainage per civil engineer.
      • Infill Material:
        o Infill material shall be Thermoplastic Elastomer (TPE) sourced from North America or Europe. Silica sand component of the infill must be at least 50% of total infill by weight. TPE must not contain any of the following hazardous substances: PFOS, Halogens, PAH, Solvents (VOC). **Sand must not contain SBR (crumb rubber) nor any inorganic elements.**
      • Acceptable manufacturers of infill:
        o SOFTER SPA: Fogrin Infill Solutions, HT-140 TPE
        o Target Technologies International, PRO-Max TPE
    ▪ Field lines and markings: Factory tufted or in-laid. No cutting of turf backing or using seam tape allowed. Painted lines are not acceptable.
    ▪ Field lines, markings, logos, etc. shall be selected and coordinated with Owner input.
    ▪ Lines and markings may include multiple game lines and/or colors.
    ▪ Carpet (turf) rolls to be 15’ wide. Rolls to be stitched together in the field, not glued, to create a monolithic system.
• Maintenance Equipment Required:
  ▪ A Mechanical Field Groomer and a Sweeper, or an all-in-one unit, shall be included as part of the base bid work.
  ▪ All-in-one unit to be SMG TurfCare TCA1400 tow-behind groomer machine, fully adjustable.

• Part 3 Execution
  o Per Consultant and / or manufacturer specification.

End of Section