



Avon High School Synthetic Turf Field Feasibility Study

Town of Avon, CT

Avon Town Council Meeting

June 4, 2015

Project Location



Existing Conditions

Statement of Needs

A. Expansion of Field in Current Location

1. Effect on Baseball to the East
2. Move Inner Lanes of Track to the Outside
3. Move Bleachers to the East Site of the Field
4. Accommodate Future Sports Field Lighting
5. New Press Box

B. Multi-Purpose Artificial Field within the Existing Track

1. Will the Existing Track Support a Soccer Field?
2. Move Bleachers to the East Site of the Field
3. Accommodate Future Sports Field Lighting
4. New Press Box

C. Multi-Purpose Artificial Field Located on the Current Field Hockey Field

1. Will the Existing Field Support a Soccer Field?
2. Accommodate Future Sports Field Lighting
3. Bleachers and Press Box

Site Master Plan



Concept Plan A



Concept Plan B



Concept Plan C



Concept Plan D



Site Master Plan



Concept Plan A



Concept Plan B

Site Master Plan – Concept Plan A



Concept Plan A

Conceptual Cost Estimate – Concept Plan A

CONCEPTUAL BUDGETARY DESIGN COSTS (SOFT COSTS)			BASE ITEMS
1. Phase 1 - Pre-Referendum Services	lump sum		\$9,500.00
2. Phase 2 - Post Referendum Services (estimated)	lump sum		\$112,000.00
3. Town Bidding and Contract Expenses (estimated)	lump sum		\$10,000.00
4. Project Financing (estimated)	lump sum		\$55,000.00
Soft Costs Total			\$186,500.00

Conceptual Cost Estimate – Concept Plan A

CONCEPTUAL BUDGETARY CONSTRUCTION COSTS (HARD COSTS)

BASE ITEMS

Base Project Scope

1. Site Preparation	lump sum	\$50,000.00
2. Site Drainage Improvements (provided by Town Engineering Department)	lump sum	\$25,000.00
3. New All-Weather Main Multi-Use Turf Field (including maintenance equipment)	lump sum	\$917,500.00
4. Sports Field Equipment (compatible for all-weather turf)	lump sum	\$25,000.00
5. New 8-Lane Track	lump sum	\$435,000.00
6. Track & Field Events (Long/Triple Jump, Pole Vault, High Jump, & Shot Put)	lump sum	\$100,000.00
7. Site Improvements (walkways, retaining walls, and landscape buffers)	lump sum	\$150,000.00
8. Home Bleachers & Press Box (750 Seats)	lump sum	\$225,000.00
9. Visitor Bleachers (250 Seats)	lump sum	\$62,500.00
10. Field Lighting	lump sum	\$250,000.00
11. Escalation, Contingency, and Allowances (15%)	lump sum	\$336,000.00
Hard Costs Total		\$2,576,000.00

Base Bid Project Total

\$2,762,500.00

Conceptual Cost Estimate – Concept Plan A

CONCEPTUAL BUDGETARY CONSTRUCTION COSTS (HARD COSTS)			ADD/ALTERNATE ITEMS
Alternates			
1. New All-Weather Secondary Turf Field (Field Hockey)	lump sum		\$656,500.00
2. Main Field Lighting	lump sum		\$250,000.00
3. Storage Building	lump sum		\$35,000.00
4. Escalation, Contingency, and Allowances (15%)	lump sum		\$141,225.00
Alternates Total			\$1,082,725.00
Base Bid & Alternates Project Total			\$3,845,225.00

**Conceptual Cost Estimate is based on standard industry pricing and the Schematic Design scope of work. It will continue to be refined into an Estimate of Probable Construction Costs as the project design develops in further detail.*

**We have made certain assumptions about the existing conditions and design of certain components of the project that may have an impact to the overall project cost.*

Lifecycle Cost Analysis

Expense	Natural Grass Field (Conventional)	Natural Grass Field (Organic)	All-Weather Turf Field
Initial Costs			
Field Base and Drainage Construction Costs	\$275,000	\$275,000	\$350,000
Surfacing Construction Costs	\$135,000	\$165,000	\$475,000
Maintenance Equipment Cost	\$0	\$0	\$25,000
Total Initial Cost	\$410,000	\$440,000	\$850,000
Annual Costs			
Maintenance Cost	\$24,500	\$35,000	\$4,500
Water (Irrigation) and Repairs Cost	\$5,500	\$5,500	\$0
Atheltic Field Painting	\$9,500	\$9,500	\$500
Total Annual Cost	\$39,500	\$50,000	\$5,000
Total Cost Over 15 Years Lifespan	\$592,500	\$750,000	\$75,000
Surfacing Replacement Costs (over 15 years)			
Decompact, Airate, and Re-Sod (4 times)	\$115,000	\$140,000	\$0
New All-Weather Surface	\$0	\$0	\$450,000
Total Replacement Costs	\$115,000	\$140,000	\$450,000
Total Lifecycle Cost (over a 15 year period)	\$1,117,500	\$1,330,000	\$1,375,000
Total Cost Per Year	\$74,500	\$88,667	\$91,667
Number of Available Field Hours Per Year	300	300	800
Number of Events/Practices Available Per Year (assumed 3 hour per event)	100	100	266.67
Average Cost Per Event	\$745	\$887	\$344

Maintenance

■ Weekly

1. Review and Sweeping/Raking of Infill at High Use Areas
< 1 Hour

■ Monthly

1. Static/Drag Behind Brush Grooming
< 4 Hours

■ Spring & Fall

1. Drag Behind Sweeping
2. Tines Grooming
3. Seam Review
< 8 Hours



■ Maintenance Training

Project Schedule Moving Forward

PHASE 1 – Pre- Referendum Services	Status	Date
Project Kick-Off	Completed	March 31, 2015 7:30 am
Committee Meeting	Completed	April 14, 2015 7:30 am
Committee Meeting	Completed	April 28, 2015 6:30 pm
Town Council Meeting		June 4, 2015