

PRELIMINARY CONSTRUCTION COST ESTIMATE  
SOUTH ORANGE AND MAPLEWOOD SCHOOL DISTRICT  
RITZER FIELD IMPROVEMENTS  
TOWNSHIP OF MAPLEWOOD, ESSEX COUNTY, NEW JERSEY

|      |                                                                                                                                                                                                                             |      |               | CONCEPT A                                                   |            | CONCEPT B                                                                    |              | CONCEPT C                                                                                                          |              | CONCEPT D                                                                                                                 |            |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------|-------------------------------------------------------------|------------|------------------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------------------------------------|--------------|---------------------------------------------------------------------------------------------------------------------------|------------|
|      |                                                                                                                                                                                                                             |      |               | Synthetic Turf Multipurpose<br>(Football, Soccer, Lacrosse) |            | Synthetic Turf Multipurpose<br>(Soccer, Lacrosse, Field Hockey, 2x Softball) |              | Synthetic Turf Multipurpose<br>(Soccer, Lacrosse, Field Hockey)<br>and 1x Natural Grass Softball and Practice Area |              | Synthetic Turf Multipurpose<br>(Soccer, Lacrosse, Field Hockey)<br>and 1x Synthetic Turf Softball and Grass Practice Area |            |
| ITEM | DESCRIPTION                                                                                                                                                                                                                 | UNIT | UNIT PRICE    | QUANTITY                                                    | TOTAL      | QUANTITY                                                                     | TOTAL        | QUANTITY                                                                                                           | TOTAL        | QUANTITY                                                                                                                  | TOTAL      |
| 1    | Clearing Site, Mobilization, and Demobilization                                                                                                                                                                             | LS   | Varies        | 1                                                           | \$ 225,000 | 1                                                                            | \$ 325,000   | 1                                                                                                                  | \$ 300,000   | 1                                                                                                                         | \$ 325,000 |
| 2    | Strip, Stockpile, and Dispose of Excess Topsoil                                                                                                                                                                             | CY   | \$ 50.00      | 1,730                                                       | \$ 86,500  | 2,320                                                                        | \$ 116,000   | 2,790                                                                                                              | \$ 139,500   | 2,790                                                                                                                     | \$ 139,500 |
| 3    | Earthwork and Subgrade Preparation for Synthetic Turf Field Areas and Underground Storm Detention, including all cuts, fills, import fill, compaction, grading, removal of excess/unsuitable soils, and all incidental work | LS   | Varies        | 1                                                           | \$ 470,000 | 1                                                                            | \$ 630,000   | 1                                                                                                                  | \$ 360,000   | 1                                                                                                                         | \$ 580,000 |
| 4    | Earthwork and Subgrade Preparation for Sod Field Areas and including all cuts, fills, free-draining import fill, compaction, grading, removal of excess/unsuitable soils, and all incidental work                           | LS   | Varies        | -                                                           | -          | -                                                                            | -            | 1                                                                                                                  | \$ 127,000   | 1                                                                                                                         | \$ 70,000  |
| 5    | 12" x 12" Concrete Vertical Curb and Turf Nailer Board                                                                                                                                                                      | LF   | \$ 45.00      | 1,260                                                       | \$ 56,700  | 1,550                                                                        | \$ 69,750    | 1,080                                                                                                              | \$ 48,600    | 1,915                                                                                                                     | \$ 86,175  |
| 6    | Nonwoven Geotextile Fabric                                                                                                                                                                                                  | SY   | \$ 4.00       | 10,400                                                      | \$ 41,600  | 13,940                                                                       | \$ 55,760    | 8,000                                                                                                              | \$ 32,000    | 12,830                                                                                                                    | \$ 51,320  |
| 7    | No. 8 Finishing Stone, 2" Thick                                                                                                                                                                                             | CY   | \$ 100.00     | 580                                                         | \$ 58,000  | 770                                                                          | \$ 77,000    | 440                                                                                                                | \$ 44,000    | 710                                                                                                                       | \$ 71,000  |
| 8    | No. 57 Stone, 6" Thick                                                                                                                                                                                                      | CY   | \$ 75.00      | 1,730                                                       | \$ 129,750 | 2,320                                                                        | \$ 174,000   | 1,330                                                                                                              | \$ 99,750    | 2,140                                                                                                                     | \$ 160,500 |
| 9    | 1"x12" Underdrain System                                                                                                                                                                                                    | LS   | Varies        | 1                                                           | \$ 50,000  | 1                                                                            | \$ 60,000    | 1                                                                                                                  | \$ 70,000    | 1                                                                                                                         | \$ 80,000  |
| 10   | 10" Perforated HDPE Pipe                                                                                                                                                                                                    | LF   | \$ 65.00      | 850                                                         | \$ 55,250  | 1,150                                                                        | \$ 74,750    | 850                                                                                                                | \$ 55,250    | 1,150                                                                                                                     | \$ 74,750  |
| 11   | Synthetic Turf Field Carpet and Rubber Infill System, including all field markings and incidental work                                                                                                                      | SF   | \$ 6.50       | 93,600                                                      | \$ 608,400 | 125,460                                                                      | \$ 815,490   | 72,000                                                                                                             | \$ 468,000   | 115,500                                                                                                                   | \$ 750,750 |
| 12   | Furnish and Install Sod                                                                                                                                                                                                     | SF   | \$ 5.50       | -                                                           | -          | -                                                                            | -            | 63,500                                                                                                             | \$ 349,250   | 35,000                                                                                                                    | \$ 192,500 |
| 13   | Fnurish and Install Infield Clay Mix                                                                                                                                                                                        | CY   | \$ 150.00     | -                                                           | -          | -                                                                            | -            | 300                                                                                                                | \$ 45,000    | -                                                                                                                         | -          |
| 14   | Fnurish and Install Mound, Home Plate and Bases                                                                                                                                                                             | LS   | \$ 2,500.00   | -                                                           | -          | -                                                                            | -            | 1                                                                                                                  | \$ 2,500     | -                                                                                                                         | -          |
| 15   | Stormwater Outlet Control Structure                                                                                                                                                                                         | UN   | \$ 7,500.00   | 1                                                           | \$ 7,500   | 1                                                                            | \$ 7,500     | 1                                                                                                                  | \$ 7,500     | 2                                                                                                                         | \$ 15,000  |
| 16   | Yard Inlet                                                                                                                                                                                                                  | UN   | \$ 1,500.00   | -                                                           | -          | -                                                                            | -            | 5                                                                                                                  | \$ 7,500     | 5                                                                                                                         | \$ 7,500   |
| 17   | Manhole, 4' Diameter                                                                                                                                                                                                        | UN   | \$ 6,000.00   | 5                                                           | \$ 30,000  | 5                                                                            | \$ 30,000    | 5                                                                                                                  | \$ 30,000    | 5                                                                                                                         | \$ 30,000  |
| 18   | 36" HDPE Pipe                                                                                                                                                                                                               | LF   | \$ 150.00     | 690                                                         | \$ 103,500 | 690                                                                          | \$ 103,500   | 690                                                                                                                | \$ 103,500   | 690                                                                                                                       | \$ 103,500 |
| 19   | 4' High Vinyl-Coated Chain Link Fence with Safety Topper                                                                                                                                                                    | LF   | \$ 80.00      | 780                                                         | \$ 62,400  | -                                                                            | -            | 360                                                                                                                | \$ 28,800    | 360                                                                                                                       | \$ 28,800  |
| 20   | 6' High Vinyl-Coated Chain Link Fence with Safety Topper                                                                                                                                                                    | LF   | \$ 100.00     | 480                                                         | \$ 48,000  | -                                                                            | -            | 975                                                                                                                | \$ 97,500    | 975                                                                                                                       | \$ 97,500  |
| 21   | 8' High Vinyl-Coated Chain Link Fence                                                                                                                                                                                       | LF   | \$ 120.00     | -                                                           | -          | 1,060                                                                        | \$ 127,200   | 180                                                                                                                | \$ 21,600    | 180                                                                                                                       | \$ 21,600  |
| 22   | 50' Wide Vinyl-Coated Chain Link Fence Arch Backstop                                                                                                                                                                        | UN   | \$ 60,000.00  | -                                                           | -          | 2                                                                            | \$ 120,000   | 1                                                                                                                  | \$ 60,000    | 1                                                                                                                         | \$ 60,000  |
| 23   | Dugout Shelter, including 8' Chain Link Fence and Gates, Bench, Metal Roof, and Concrete Pad                                                                                                                                | UN   | \$ 30,000.00  | -                                                           | -          | 4                                                                            | \$ 120,000   | 2                                                                                                                  | \$ 60,000    | 2                                                                                                                         | \$ 60,000  |
| 24   | 20' Multi-Sport Ballstopper Netting                                                                                                                                                                                         | LF   | \$ 200.00     | 360                                                         | \$ 72,000  | 240                                                                          | \$ 48,000    | 400                                                                                                                | \$ 80,000    | 400                                                                                                                       | \$ 80,000  |
| 25   | 30' Multi-Sport Ballstopper Netting                                                                                                                                                                                         | LF   | \$ 300.00     | 120                                                         | \$ 36,000  | 400                                                                          | \$ 120,000   | 200                                                                                                                | \$ 60,000    | 200                                                                                                                       | \$ 60,000  |
| 26   | Football Goal                                                                                                                                                                                                               | UN   | \$ 15,000.00  | 2                                                           | \$ 30,000  | -                                                                            | -            | -                                                                                                                  | -            | -                                                                                                                         | -          |
| 27   | Portable Soccer Goal, including mobile wheel kit                                                                                                                                                                            | UN   | \$ 5,000.00   | 2                                                           | \$ 10,000  | 2                                                                            | \$ 10,000    | 2                                                                                                                  | \$ 10,000    | 2                                                                                                                         | \$ 10,000  |
| 28   | Portable Lacrosse Goal, including mobile wheel kit                                                                                                                                                                          | UN   | \$ 1,000.00   | 2                                                           | \$ 2,000   | 2                                                                            | \$ 2,000     | 2                                                                                                                  | \$ 2,000     | 2                                                                                                                         | \$ 2,000   |
| 29   | 60-seat Aluminum Bleacher System and Concrete Pad                                                                                                                                                                           | UN   | \$ 25,000.00  | 2                                                           | \$ 50,000  | 4                                                                            | \$ 100,000   | 4                                                                                                                  | \$ 100,000   | 4                                                                                                                         | \$ 100,000 |
| 30   | Enclosed Batting Cages                                                                                                                                                                                                      | LS   | \$ 30,000.00  | -                                                           | -          | 1                                                                            | \$ 30,000    | 1                                                                                                                  | \$ 30,000    | 1                                                                                                                         | \$ 30,000  |
| 31   | Portable Outfield Fencing System and Foil Pole Kit (per field)                                                                                                                                                              | UN   | \$ 20,000.00  | -                                                           | -          | 2                                                                            | \$ 40,000    | -                                                                                                                  | -            | -                                                                                                                         | -          |
| 32   | Hot Mix Asphalt Walkway, 2" Thick, including sub-base                                                                                                                                                                       | SY   | \$ 50.00      | 900                                                         | \$ 45,000  | 900                                                                          | \$ 45,000    | 1,100                                                                                                              | \$ 55,000    | 1,100                                                                                                                     | \$ 55,000  |
| 33   | Concrete Walkway, 4" Thick                                                                                                                                                                                                  | SY   | \$ 100.00     | -                                                           | \$ -       | 250                                                                          | \$ 25,000    | 150                                                                                                                | \$ 15,000    | 150                                                                                                                       | \$ 15,000  |
| 34   | Topsoil Spreading, 4" thick (outside of field areas)                                                                                                                                                                        | SY   | \$ 6.00       | 7,400                                                       | \$ 44,400  | 7,200                                                                        | \$ 43,200    | 4,400                                                                                                              | \$ 26,400    | 2,700                                                                                                                     | \$ 16,200  |
| 35   | Fertilizing and Seeding (outside of field areas)                                                                                                                                                                            | SY   | \$ 2.00       | 7,400                                                       | \$ 14,800  | 7,200                                                                        | \$ 14,400    | 4,400                                                                                                              | \$ 8,800     | 2,700                                                                                                                     | \$ 5,400   |
| 36   | Straw Mulching (outside of field areas)                                                                                                                                                                                     | SY   | \$ 2.00       | 7,400                                                       | \$ 14,800  | 7,200                                                                        | \$ 14,400    | 4,400                                                                                                              | \$ 8,800     | 2,700                                                                                                                     | \$ 5,400   |
| 37   | Field Irrigation System Allowance                                                                                                                                                                                           | AL   | Varies        | -                                                           | -          | -                                                                            | -            | 1                                                                                                                  | \$ 250,000   | 1                                                                                                                         | \$ 50,000  |
| 38   | Landscaping Allowance                                                                                                                                                                                                       | AL   | Varies        | 1                                                           | \$ 30,000  | 1                                                                            | \$ 30,000    | 1                                                                                                                  | \$ 50,000    | 1                                                                                                                         | \$ 50,000  |
| 39   | Scoreboard Allowance                                                                                                                                                                                                        | AL   | \$ 75,000.00  | 1                                                           | \$ 50,000  | 1                                                                            | \$ 50,000    | 1                                                                                                                  | \$ 50,000    | 1                                                                                                                         | \$ 50,000  |
| 40   | Retaining Wall and Additional Earthwork Allowance for Softball                                                                                                                                                              | AL   | \$ 100,000.00 | -                                                           | -          | 1                                                                            | \$ 100,000   | 1                                                                                                                  | \$ 100,000   | 1                                                                                                                         | \$ 100,000 |
|      |                                                                                                                                                                                                                             |      |               | SPORTS FIELD SUBTOTAL:                                      |            | \$ 2,431,600                                                                 | \$ 3,577,950 | \$ 3,403,250                                                                                                       | \$ 3,634,395 |                                                                                                                           |            |
|      |                                                                                                                                                                                                                             |      |               | 15% CONTINGENCY:                                            |            | \$ 364,740                                                                   | \$ 536,693   | \$ 510,488                                                                                                         | \$ 545,159   |                                                                                                                           |            |
|      |                                                                                                                                                                                                                             |      |               | TOTAL ESTIMATED COST:                                       |            | \$ 2,796,340                                                                 | \$ 4,114,643 | \$ 3,913,738                                                                                                       | \$ 4,179,554 |                                                                                                                           |            |

| ALTERNATE A: SPORTS LIGHTING |                                                  |    |        | 4-pole, 64-fixture System |              | 8-pole, 96-fixture System |              | 7-pole, 96-fixture System |            | 7-pole, 96-fixture System |            |
|------------------------------|--------------------------------------------------|----|--------|---------------------------|--------------|---------------------------|--------------|---------------------------|------------|---------------------------|------------|
| A-1                          | Electrical Site Work - Multipurpose Field        | LS | Varies | 1                         | \$ 250,000   | 1                         | \$ 400,000   | 1                         | \$ 140,000 | 1                         | \$ 140,000 |
| A-2                          | Electrical Poles and Lights - Multipurpose Field | LS | Varies | 1                         | \$ 465,000   | 1                         | \$ 805,000   | 1                         | \$ 288,000 | 1                         | \$ 288,000 |
| A-3                          | Electrical Site Work - Softball Field            | LS | Varies | -                         | -            | -                         | -            | 1                         | \$ 210,000 | 1                         | \$ 210,000 |
| A-4                          | Electrical Poles and Lights - Softball Field     | LS | Varies | -                         | -            | -                         | -            | 1                         | \$ 432,000 | 1                         | \$ 432,000 |
| ALTERNATE 'A' SUBTOTAL:      |                                                  |    |        | \$ 715,000                | \$ 1,205,000 | \$ 1,070,000              | \$ 1,070,000 |                           |            |                           |            |

| ALTERNATE B: ORGANIC TURF INFILL AND PAD |                        |    |         |            |            |            |            |        |           |         |            |
|------------------------------------------|------------------------|----|---------|------------|------------|------------|------------|--------|-----------|---------|------------|
| B-1                                      | Shock Absorbing Pad    | SF | \$ 1.25 | 93,600     | \$ 117,000 | 125,460    | \$ 156,825 | 72,000 | \$ 90,000 | 115,500 | \$ 144,375 |
| B-2                                      | Organic Infill Upgrade | SF | \$ 0.50 | 93,600     | \$ 46,800  | 125,460    | \$ 62,730  | 72,000 | \$ 36,000 | 115,500 | \$ 57,750  |
| ALTERNATE 'B' SUBTOTAL:                  |                        |    |         | \$ 163,800 | \$ 219,555 | \$ 126,000 | \$ 202,125 |        |           |         |            |

- Notes:**
- 1 Earthwork allowance assumes non-regulated soil disposal.
  - 2 Field design anticipates that turf will generally follow existing natural slope of field (no crown) with amendments to limit excessive cross slope or running slope of field.
  - 3 Final turf graphics package (end zone lettering, midfield logos, integrated graphics) to be determined and may result in additional costs.
  - 4 Estimate assumes realignment of existing 30" storm pipe running under proposed field location.
  - 5 Estimate assumes replacement of existing asphalt perimeter walkway due to age, condition and proximity to work area.