

Maintenance Costs for Natural Grass Soccer Field						
Annual Maintenance Costs						
Materials	\$5,233					
Labor	\$23,585					
Fuel	\$585					
Water	\$15,000					
Total Cost	\$44,404					
General Turf Maintenance - Soccer Field						
Labor	Staff	Frequency	Hours Per	Annual Labor Hours	Hourly Rate w Burden	Cost
Mowing (Fall / Winter)	Groundskeeper II	Weekly	2.5	65	\$ 49.37	\$ 3,208.92
Mowing (Spring /Summer)	Groundskeeper II	2x / Week	5.5	143	\$ 49.37	\$ 7,059.62
Edging	Groundskeeper II	Weekly	2.5	130	\$ 49.37	\$ 6,417.84
Aerating	Park Maintenance Supervisor	Twice / yr	3	6	\$ 66.27	\$ 397.60
	Sr. Groundskeeper	Twice / yr	3	6	\$ 55.10	\$ 330.58
	Groundskeeper II	Twice / yr	3	6	\$ 49.37	\$ 296.21
Fertilizing	Sr. Groundskeeper	Twice / yr	2	4	\$ 49.37	\$ 197.47
	Groundskeeper II	Twice / yr	2	4	\$ 49.37	\$ 197.47
Spot Seed	Groundskeeper II	Twice / yr	4	8	\$ 49.37	\$ 394.94
Verticut Turf	Groundskeeper II	Twice / yr	8	16	\$ 49.37	\$ 789.89
		Daily Check, Monthly Test, and as needed repairs				
Irrigation Checks / Repairs	Irrigation Technician			80	\$ 53.69	\$ 4,294.88
Total Labor						\$ 23,585.43
Category	Material / Staff	Unit Measure	Quantity	Cost Per	Cost	Total Costs
Supplies / Materials	Top Soil	Tons	35	\$ 19	\$655.99	
	Perrenial Rye Seed	50lb bags	4	\$ 116	\$463.05	
	Bermuda Seed	50lb bags	1	\$ 331	\$330.75	
	Fertilizer	50lb bags	16	\$ 21	\$335.16	
	Sequoia Red Moss Topper	cu yards	20	\$ 47	\$948.15	
	Irrigation Supplies	As Needed			\$2,500.00	
Total Materials						\$5,233.10
Utility	Units	Annual Use	Cost Per	Total		
Fuel to Mow	2.5 Gallons/Mow	195	\$3.00	\$585.00		
Water	Gallons	2,500,000	\$0.0060	\$15,000.00		

[illegible]

Annual Renovation Costs (Seed)						
Materials	\$13,507					
Equipment Rentals	\$4,600					
Contract Work (grading)	\$6,000					
Labor	\$8,801					
<b>Total Cost</b>	<b>\$32,909</b>					
Estimated Field Renovation Costs - Seed (90,000 sq. ft. Complex soccer field)						
Category	Material / Staff	Unit Measure	Quantity	Cost Per	Cost	Total Costs
Supplies / Materials	Top Soil	Tons	150	\$ 19	\$2,811.38	
	Perrenial Rye Seed	50lb bags	18	\$ 116	\$2,083.73	
	Bermuda Seed	50lb bags	6	\$ 331	\$1,984.50	
	Fertilizer	50lb bags	16	\$ 21	\$335.16	
	Sequoia Red Moss Topper	cu yards	80	\$ 47	\$3,792.60	
	Irrigation Supplies	As Needed			\$2,500.00	<b>\$13,507.36</b>
Equipment Rentals	Stripping	Day	1	\$ 2,250	\$2,250.00	
	Top Dresser	Day	1	\$ 1,200	\$1,200.00	
	Heavy Roller	Day	1	\$ 1,150	\$1,150.00	<b>\$4,600.00</b>
In House Staff Labor	Park Services Manager	Hours	16	\$ 83.27	\$1,332.26	
	Park Maintenance Supervisor	Hours	22	\$ 66.27	\$1,457.85	
	Sr. Groundskeeper	Hours	29	\$ 55.10	\$1,597.81	
	Irrigation Technician	Hours	15	\$ 53.69	\$805.35	
	Groundskeeper II	Hours	42	\$ 49.37	\$2,073.54	
	Groundskeeper I	Hours	42	\$ 36.53	\$1,534.39	<b>\$8,801.20</b>
Lasergrading	Contract Labor	no ripping, tilling	1	\$ 6,000	\$6,000.00	<b>\$6,000.00</b>
<b>Total Cost</b>					<b>\$32,908.56</b>	<b>\$ 32,908.56</b>

Maintenance Costs for Natural Grass Soccer Field with EPIC System						
Annual Maintenance Costs						
Materials	\$11,206					
Labor	\$28,362					
Fuel	\$585					
Water	\$9,000					
Total Cost	\$49,153					
General Turf Maintenance - Soccer Field						
Labor	Staff	Frequency	Hours Per	Annual Labor Hours	Hourly Rate w Burden	Cost
Mowing (Fall / Winter)	Groundskeeper II	Weekly	2.5	65	\$ 49.37	\$ 3,208.92
Mowing (Spring /Summer)	Groundskeeper II	2x / Week	5.5	143	\$ 49.37	\$ 7,059.62
Edging	Groundskeeper II	Weekly	2.5	130	\$ 49.37	\$ 6,417.84
Aerating	Park Maintenance Supervisor	Monthly	3	36	\$ 66.27	\$ 2,385.58
	Sr. Groundskeeper	Monthly	3	36	\$ 55.10	\$ 1,983.49
	Groundskeeper II	Monthly	3	36	\$ 49.37	\$ 1,777.25
Fertilizing	Sr. Groundskeeper	Monthly	2	24	\$ 49.37	\$ 1,184.83
	Groundskeeper II	Monthly	2	24	\$ 49.37	\$ 1,184.83
Spot Seed	Groundskeeper II	Monthly	4	48	\$ 49.37	\$ 2,369.66
Verticut Turf	Groundskeeper II	Twice / yr	8	16	\$ 49.37	\$ 789.89
		Daily Check, Monthly Test, and as needed repairs				
Irrigation Checks / Repairs	Irrigation Technician		0		\$ 53.69	\$ -
Total Labor						\$ 28,361.92
Category	Material / Staff	Unit Measure	Quantity	Cost Per	Cost	Total Costs
Supplies / Materials	Proprietary Sand	Tons	35	\$ 28	\$983.98	
	Perrenial Rye Seed	50lb bags	24	\$ 116	\$2,778.30	
	Bermuda Seed	50lb bags	6	\$ 331	\$1,984.50	
	Fertilizer	50lb bags	96	\$ 21	\$2,010.96	
	Sequoia Red Moss Topper	cu yards	20	\$ 47	\$948.15	
	Irrigation Supplies	As Needed			\$2,500.00	
Total Materials*						\$11,205.89
*Materials and Labor for aerating, seeding (6 times per year), and fertilization have been adjusted to reflect monthly application.						
Proprietary Sand costs higher than the soil we purchase. Not having an actual cost per ton, it is estimated at 1.5 times soil.						
Utility	Units	Annual Use	Cost Per	Total		
Fuel to Mow	2.5 Gallons/Mow	195	\$3.00	\$585.00		
Water**	Gallons	1,500,000	\$0.0060	\$9,000.00		
**Water use is being estimated at 60% to that of natural turf; although not substantiated that these would be actual use reductions.						

[illegible]

[illegible]

Renovation Cost (Glorietta Ballfield)						
Category			Cost			
Materials	Sand, gravel, top soil, brick dust		\$7,375.14			
Equipment Rentals	Stripping, Rolling		\$4,720.86			
Drainage Materials	Pipes		\$3,389.97			
In House Staff Labor			\$38,546.18			
Lasergrading	Contract Labor		\$14,900			
Sod Purchase and Installation	Contract Labor		\$38,500			
<b>Total Cost</b>			<b>\$107,432.15</b>			

### Maintenance Costs for Artificial Turf

Annual Maintenance Costs	
Materials	\$2,134
Labor	\$3,851
Contract labor	\$4,300
<b>Total Cost</b>	<b>\$10,285</b>

Artificial Turf Maintenance - Soccer Field						
Labor	Staff	Frequency	Hours Per	Annual Labor Hours	Hourly Rate w Burden	Cost
Brushing	Groundskeeper II	Bi-Weekly	1.5	39	\$ 49.37	\$ 1,925.35
Grooming	Groundskeeper II	Bi-Weekly	1.5	39	\$ 49.37	\$ 1,925.35
Decompaction	Contract Labor	Annually				\$ 3,500.00
*Repairs	Contract Labor	As Needed, once every five years				\$ 800.00
<b>Total Labor</b>						<b>\$ 8,150.70</b>
Category	Material / Staff	Unit Measure	Quantity	Cost Per	Cost	Total Costs
**Supplies/Materials	Geofill infill	lb	2200	\$ 0.97	\$2,134.00	\$ 2,134.00
<b>Total Materials</b>						<b>\$2,134.00</b>

\*Repairs: most seam tears are covered under warranty.

Wear and tear is estimated to need repairs every 5 years; at a cost of \$4,000, on averages \$800 per year.

\*\*Geofill material is provided during construction & included as part of the annual de-compaction of the fields.

Geofill ships in a 2,200 lb sack for \$2,134; this amount is used to estimate cost for annual infill material