

ESTIMATE OF PROBABLE LONG TERM COSTS

Project: Martha's Vineyard Regional High School - Athletic Field Master Plan

Date: December 10, 2020

Project Manager: CCH

Client: Martha's Vineyard Regional High School

By: Huntress Associates, Inc.

Plan Title: NATURAL GRASS FIELD - 20 YEAR COST ANALYSIS

17 Tewksbury Street
Andover, MA 01810

ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
NATURAL GRASS FIELD - 20 YEAR COSTS ANALYSIS (Years 1-10)				
NATURAL GRASS FIELD - INSTALLATION				
Natural Grass Field - Subbase & Drainage Construction	105,252	sf	\$1.20	\$126,302.40
Natural Grass Field - Irrigation	105,252	sf	\$0.35	\$36,838.20
Natural Grass Field - Topsoil Installation	3,648	cy	\$24.00	\$87,552.00
Natural Grass Field - Soil Amendments	105,252	sf	\$0.16	\$16,840.32
Natural Grass Field - Slice Seed, Hydroseed & Fertilize	105,252	sf	\$0.19	\$19,997.88
Subtotal				\$ 287,530.80
MAINTENANCE				
Natural Grass Field Maintenance	10	Years	\$25,084.00	\$ 250,840.00
Subtotal				\$ 250,840.00
TOTAL				\$ 538,370.80
FIELD COST PER HOUR				
Field cost by annual use hours (years 1-10)	511	10	5,110	\$ 105.36

ITEM	QUANTITY	UNIT	UNIT COST	TOTAL
NATURAL GRASS FIELD - 20 YEAR COSTS ANALYSIS (years 11-20)				
NATURAL GRASS FIELD - RENOVATION (at year 10)				
Natural Grass Field - Verti-quake Decompaction	105,252	sf	\$0.02	\$2,105.04
Natural Grass Field - Irrigation repair & cleanout	1	allow	\$2,500.00	\$2,500.00
Natural Grass Field - Drainage repair & cleanout	1	allow	\$6,000.00	\$6,000.00
Natural Grass Field - Field laser grading to re-establish crown	1	allow	\$25,000.00	\$25,000.00
Natural Grass Field - Additional topsoil, as needed.	250	cy	\$24.00	\$6,000.00
Natural Grass Field - Soil Amendments (Sand & Organics)	1	allow	\$7,500.00	\$7,500.00
Natural Grass Field - Resod to field limits, includes dragging, rolling and sod install.	105,252	sf	\$0.75	\$78,939.00
Natural Grass Field - Fertilizers	1	allow	\$7,500.00	\$7,500.00
Natural Grass Field - Field painting for all sports, including survey layout	1	allow	\$9,500.00	\$9,500.00
Subtotal				\$145,044.04
MAINTENANCE				
Natural Grass Field Maintenance	10	Years	\$ 25,084.00	\$ 250,840.00
Subtotal				\$ 250,840.00
TOTAL				\$ 395,884.04
FIELD COST PER HOUR				
Field cost by annual use hours (years 11-20)	511	10	5,110	\$ 77.47

* Based upon existing use in 2018

* Based upon 2019 costs

ITEM	Hours	Cost/hour	Product Cost	TOTAL
NATURAL GRASS FIELD - ESTIMATED ANNUAL MAINTENANCE COSTS				
Mowing & Trimming (28 cuttings @ 2.25 hours ea)	63	\$42.39	\$0.00	\$2,670.57
Aeration, 5 times per year	40	\$42.39	\$0.00	\$1,695.60
Fertilizer @ 3.0#s N / Year	12	\$42.39	\$2,295.00	\$2,803.68
Soil Amendments	3	\$42.39	\$551.04	\$678.21
Herbicide Applications	3	\$42.39	\$45.32	\$172.49
Pre-emergent	3	\$42.39	\$158.65	\$285.82
Weed Control - spot spray	3	\$42.39	\$40.00	\$167.17
Game Day Prep - Soccer (1.5 hours x 6 games)	9	\$42.39	\$500.00	\$881.51
Game Day Prep - Football (2.5 hours x 6 games)	15	\$42.39	\$750.00	\$1,385.85
Weekly Practice Prep - All Sports (6.0 hours x 28 weeks)	168	\$42.39	\$500.00	\$7,621.52
Overseeding	30	\$42.39	\$1,710.00	\$2,981.70
Insecticide Applications	8	\$42.39	\$623.10	\$962.22
Irrigation (Operation & Repair)	8	\$42.39	\$1,500.00	\$1,839.12
Verti-drain Decompaction	8	\$42.39	\$600.00	\$939.12
TOTAL	373	\$42.39	\$9,273.11	\$25,084.58

* Based upon actual employee cost/hour provided by MVRHS.