

December 1, 2020

Mr. Alex Elvin, General Planner
Martha's Vineyard Commission
PO Box 1447
Oak Bluffs, MA 02557

Re: Questions raised by MVC Staff 10/26/20 (Amended DRI # 352)

Dear Mr. Elvin;

I received your additional staff questions dated October 26, 2020, regarding the MVRHS's Application for an amended DRI, as referenced above. I have coordinated our reply with the MVPS and project team. The following is a listing of your questions and our responses.

FUNDING/OTHER SCHOOL NEEDS

- 1. How does this fit in with overall school building plans?** *Response: There is no "overall school building plan" yet. While we are eager for the resolution of the funding issues required to renovate/rebuild our high school, we cannot wait to address our most urgent facility need, our track. It has reached the top of our facilities priority list. The President of Cape and Island Tennis & Track said, the track "has been repaired beyond its useful life" and recently noted that "at some point in the foreseeable future, the conference that Martha's Vineyard is a part of, will disallow athletes from competition." When we can move forward with a high school building project, 82% of the campus will remain available, unimpacted by Phase One. The Phase One project, located entirely on the east side of Sanderson Road, separate and apart from the school itself, encompasses only 18% of the high school campus, allowing for flexibility in future building planning. Financially, this project will be privately funded and does not impact financial planning surrounding the building/renovation of the high school. Note that many costs associated with the Phase One project are in fact ineligible for MSBA funding. See response to Question 2.*

- 2. How will private funding affect future MSBA requests?** *Response: The private funding will positively impact future MSBA requests. **Private funding shows community support behind our students' and our school.***

*The MSBA encourages communities to fund the construction of outdoor athletic facilities on their own and would not be likely to approve a request to include those expenses in a reimbursement schedule on a future application. The MSBA already identifies costs associated with athletic stadiums and their associated excavation, earthwork, walkways, concession stands, press boxes, toilet facilities and equipment for outdoor athletic facilities as **ineligible for reimbursement.***

- 3. Will replacement also be covered by donations?** *Response: Yes, replacement can be covered by donations. Such donations can accrue over time like those revenue sources of the Performing Arts Center (PAC) or budgeted as determined by the School Committee.*



4. **How will future phases be funded?** *Response: The application before you does not contain future phases. We respectfully request that all questions be focused on the scope of work contained within our application. The impact of future phases regarding funding, budgets and environmental impacts would be the subject of a future DRI review process and would be required to comply with the requirements in place at that time.*

The new 400m track for our students is an immediate need. MVRHS school committee members are elected, in part, to develop budgets that meet the needs of students while respecting the thresholds of taxpayers. We respectfully ask for your support in allowing us to complete the task of providing upgraded athletic facilities for our current and future students.

USAGE

5. **Provide intensity factor for field use estimate.** *Response: MVC's independent peer review agent, Horsley Witten, in their September 12, 2020 High School Athletic Field Case Study, recommended that we apply an "intensity factor to account for differences in field stress by sport...similar to Falmouth's weighted estimate." As an example, the Falmouth study assigns an intensity factor of 1.0 to girl's soccer, while boy's football received an intensity factor of 2.0. This is intended to show that the wear from high school football on a natural grass athletic field was twice as intense as the wear from high school girl's soccer. If we were to apply all of the Falmouth "intensity factors" to this project, we would see our annual field use hours jump from 3850 to 4976, as shown below. **This represents an increase of 23% and would further indicate that the current field use is beyond the capacity of the existing natural grass fields and that the MVRHS campus could benefit from the addition of one synthetic turf surface.***

| Current High School Sport Field Usage (With weighted intensity from Falmouth Study) | | | | | | | |
|---|-----------------|-------------|----------------|-----------------|-------------|-----------------------------------|------------------------|
| Team | Weeks Scheduled | Events/week | Event/annually | Hours per event | Total Hours | Intensity Factor (Falmouth Study) | Total Hours (Weighted) |
| V Boys soccer | 13 | 6 | 78 | 2.5 | 195 | 1.25 | 243.75 |
| JV Boys soccer | 13 | 6 | 78 | 2.5 | 195 | 1.25 | 243.75 |
| V Girls soccer | 13 | 6 | 78 | 2.5 | 195 | 1 | 195 |
| JV Girls soccer | 13 | 6 | 78 | 2.5 | 195 | 1 | 195 |
| V Football | 14 | 6 | 84 | 2.5 | 210 | 2 | 420 |
| JV Football | 14 | 6 | 84 | 2.5 | 210 | 2 | 420 |
| V Boys lacrosse | 11 | 6 | 66 | 2.5 | 165 | 1.75 | 288.75 |
| JV Boys lacrosse | 11 | 6 | 66 | 2.5 | 165 | 1.75 | 288.75 |
| V Girls lacrosse | 11 | 6 | 66 | 2.5 | 165 | 1.5 | 247.5 |
| JV Girls lacrosse | 11 | 6 | 66 | 2.5 | 165 | 1.5 | 247.5 |
| V Field hockey | 13 | 6 | 78 | 2.5 | 195 | 1.25 | 243.75 |
| JV Field hockey | 13 | 6 | 78 | 2.5 | 195 | 1.25 | 243.75 |
| Spring track | 10 | 5 | 50 | 2.5 | 125 | 1 | 125 |
| Physical Education Classes | 17 | 20 | 340 | 1 | 340 | 0.75 | 255 |
| Middle School Track (80 athletes) | 4 | 1 | 4 | 2.5 | 10 | 1 | 10 |
| MV Youth football | 8 | 5 | 40 | 2.5 | 100 | 1.75 | 175 |
| MV Youth flag football | 6 | 4 | 24 | 2.5 | 60 | 0.75 | 45 |
| Girls & Boys Youth lacrosse | 16 | 16 | 256 | 2.5 | 640 | 1.25 | 800 |
| Babe Ruth Baseball | 16 | 5 | 80 | 2.5 | 200 | 0.9 | 180 |
| Mass Youth Soccer | | | 10 | 2.5 | 25 | 0.75 | 18.75 |
| Club camp | | | 5 | 2.5 | 12.5 | 0.75 | 9.375 |
| Metter's camp | | | 20 | 2.5 | 50 | 0.75 | 37.5 |
| Field Hockey | | | 5 | 2.5 | 12.5 | 1 | 12.5 |
| Track Camp | | | 5 | 2.5 | 12.5 | 0.75 | 9.375 |
| Football | | | 5 | 2.5 | 12.5 | 1.75 | 21.875 |
| Total | | | 1744 | | 3850 | | 4976.875 |

6. **Will the field be fenced and locked? What are the hours, especially during Covid?** *Response: Field #1, including the new synthetic turf field and 400m running track, will be fenced and can be locked. Currently the existing track is open and available to the*



community for walking and jogging, no change in use and/or hours is anticipated due to Covid.

7. Are the size and orientation appropriate for the projected uses?

Response: Yes, the plan accommodates a maximum field size of 360' in length and 225' in width. These dimensions meet the maximum recommended field sizes provided by the National Federation of State High School Associations (NFSH), and the Massachusetts Interscholastic Athletic Association (MIAA). The field orientation is appropriate and accounts for future improvements at the MVRHS campus. The 400m Track & Field orientation is similar to those found at many eastern Massachusetts high school and college campuses, including Bourne High School, Plymouth South High School, Village School Marblehead, Seekonk High School, Winthrop High School, West Bridgewater High School, University of New Hampshire, MIT, and Boston University.

HEALTH/SAFETY

8. Provide a field disinfection plan that meets new Covid response protocols and follows manufacturer guidelines. (Provide sign-off from manufacturer?)

Response: Our recommendation for a synthetic turf field disinfection program follows the recommendations of the CDC, and is further detailed in our September 28, 2020 response to question 3c from your peer review agent, Horsely Witten. Also, attached you will find a response form Greenfields USA regarding their review of our specific recommendations for disinfection of the proposed field.

9. Independent confirmation that the synthetic field products do not contain fire retardants.

Response: I suggest that the MVC discuss this matter with TetraTech who is presently conducting the third-party independent testing of the synthetic turf products on behalf of the MVC. Please refer to the IronTurf Ultra Green Synthetic Turf product MSDS sheet provided by Tencate/Greenfields submitted under separate cover Alex Elvin on 11/16/20 via email. Tencate/Greenfields has confirmed that no fire retardants are added throughout the manufacturing process. Specific identification of hazard ingredients includes the following:

B. Hazardous Ingredients

This product does not contain any hazardous ingredients.

| <u>CAS#</u> | <u>Chemical Name</u> | <u>% by Weight</u> |
|-------------|----------------------|--------------------|
| | None | |

This product is considered to be a non-hazardous chemical under the federal Occupational Safety and Health Administration hazard communication Standard 29 CFR 1910.1200.

10. Independent confirmation of temperature data (how much higher than natural grass). *Response: The temperature data used in our 11/16/20 LUPC presentation was provided by Brock USA. I am not aware of independent confirmation of the temperature data presented to date.*



11. Provide a fire safety plan for the synthetic field.

Response:

- A. **Synthetic Turf is considered non-flammable.** Greenfields/Tencate's Material Data Safety Sheets reference a flashpoint in excess of 600 degrees Fahrenheit.
- B. Toxicity of smoke from a potential fire: **Inhalation measures are listed as Non-Applicable**, with guidance for respirators during an indoor scenario. (There would be no indoor scenario in this application)
- C. Greenfields/Tencate's Material Data Safety Sheets reference the following special fire fighting procedures: **Use water to cool fire exposed surfaces** and to protect personnel. Wear self-contained breathing apparatus when fighting in contained area. (As this is an outdoor athletic field, this would not be considered a contained area.)
- D. **The proposed eight lane running track acts as a fire break.** The synthetic turf field is separated from all mature trees by the proposed 400m running track. The closest distance from the turf to the existing mature trees is 41'-6". As a point of reference, the existing fire break roads in the State Forest are 20' in width.
- E. Please refer to the IronTurf Ultra Green Synthetic Turf product MSDS sheet provided by Tencate/Greenfields submitted under separate cover Alex Elvin on 11/16/20 via email.

MAINTENANCE

- 12. Breakdown of high school's 2019 annual budget for athletic fields maintenance.**
Response: MVRHS spent approximately \$153,649 in FY19. The MVRHS has not tracked a further breakdown of the high school's 2019 athletic field expenses.

*The extreme amount of hours being programmed for high school athletics is the main reason our existing fields are failing, and not the annual maintenance program. **By introducing one synthetic turf field to take over 1800 annual hours of athletic use we can significantly improve the quality of our remaining natural grass surfaces.** Please refer to our November 13th response to question #4 regarding the STMA's recommended annual hours of use for natural grass athletic fields.*

- 13. What is the cost to maintain proposed field house and other non-field facilities?**

Response: The proposed field house construction is no longer anticipated as part of Phase One construction. It would be premature to estimate the annual maintenance cost of the future building until such time as a wastewater connection is designed, reviewed and approved by the Oak Bluffs Board of Health.



As the balance of the Phase One scope of work includes replacing and updating existing dilapidated facilities, we do not anticipate a significant increase in maintenance costs at this time.

14. What is the acreage of play area only? (For estimating potential cost of organic maintenance.) *Response: The total area of play for the five (5) natural grass fields is approximately 8.67 acres, not including field runout and landscape turf areas.*

15. Will proposed natural grass program succeed?

- a. Grading, irrigation, soil amendments, planting, nutrient management, etc.**
- b. Does the proposed maintenance program align with current BMPs?**
- c. Work with organic grass expert to develop/revise program?**

*Response: **Yes, with the addition of one (1) synthetic turf field to handle to over 1800 hours of the high school sports field use, I can confirm the recommendations will provide for a successful natural grass field capable of moderate to heavy usage with proper maintenance.***

All proposed improvements to the natural grass field are shown on the plans and documents provided to date. Improvements proposed for Field #2, which mirror the recommendations provided by TURI in their case study of athletic fields for Springfield, Massachusetts, including the following:

- a. Soil Testing:** *The soil testing results and recommendations provided to Alex Elvin on November 13, 2020 under separate cover were prepared by Duane Otto of Turf & Soil Diagnostics and are dated November 5, 2019. The results of the soil testing for Field #2 show a sandy loam with the percent organic matter content at 3.63%, which is within the specifications but is considered a bit low. Also, "the soil has a saturated hydraulic conductivity (infiltration) rate that is low, and the aeration porosity is low and capillary porosity is high....These results suggest that the soils should have poor drainage and potential for low aeration and excessive water retention. With low infiltration rates, these fields should be crowned to ensure adequate surface drainage." The plans provide for a crown at the center ridge line and a 1.5% slope to each sideline.*
- b. Soil Amendment & Aeration:** *Given the above referenced soil testing results we will be stripping, screening and amending the existing topsoil to provide better infiltration and increased porosity. We have previously submitted the sand, soil amendments and athletic field grass seed specifications to Alex Elvin of the MVC under separate cover. Aeration is recommended annually, as determined by existing field conditions and continued soil testing. A subsurface drainage system and new irrigation system will also be included in the renovated field.*
- c. Fertilization and Soil amendments:** *MVRHS staff presently subcontract the fertilization and soil amendments to Dennis Brolin of Sports Turf Specialties (STS). STS is recognized as one of the best turf and athletic field maintenance companies*



in the country and continue to work locally on Martha's Vineyard for the MVRHS and several other clients. As per the project specifications, STS will be conducting annual soil testing to determine the condition and needs of the existing topsoil fields and calibrating their equipment to ensure compliance with the MVC's Island Wide Fertilization requirements.

More information regarding STS and their capabilities can be found on their website at <https://www.sportsturfspecialties.com/>

- d. Mowing:** *The fields will be mown regularly by MVRHS staff and detailed maintenance will be conducted by STS, as noted above.*

NITROGEN

16. Independent confirmation that the infill will not leach nitrogen.

Response: I am not aware of independent confirmation but would suggest that the MVC review those specific questions with TetraTech as part of the ongoing independent third-party testing of the infill products.

*The following response was provided by **Mr. Tom Murphy, Ph.D. Senior Materials Engineer - Brock USA, LLC** "The only nitrogen-related concerns I've ever come across were related to what would happen when disposing of BrockFILL. Wood chips themselves don't contain much nitrogen, so the microorganisms that decompose wood will temporarily scavenge nitrogen from the soil (since the wood doesn't have enough nitrogen) as they break down the wood, giving it back to the soil after those organisms die off. Questions like this are often asked about using wood as mulch or in compost piles, but the concern is never that the wood will add nitrogen to the soil – it is the opposite (at least in the short term). I have never heard any concerns about wood chips themselves being a significant nitrogen source, so we have not done any testing for this.*

RECYCLING/DISPOSAL

17. Conduct an alternatives analysis for end-of-life recycling, or other waste stream diversion. *Response: As stated in our response to staff questions dated 11/13/20, question #15, we anticipate that **recycling will be an option at the end of life**. The current project specifications require a \$50,000 cash bond and a guarantee from the turf manufacturer that the product be recycled at the end of its useful life. Further, Joe Fields, President of Tencate America provided two (2) written letters to Adam Turner dated February 4, 2020 and October 15, 2020, each with a guarantee that the field would be recycled at end of life at either their existing recycling facility in the Netherlands, or their planned facility in the United States.*

I expect that MVC will place a condition on their DRI approval of the project that the synthetic turf carpet be recycled at the end of life, and that the MVC be provided with the appropriate chain of custody documentation of the entire recycling process.



OTHER

18. What is the anticipated start date and duration of construction? *Response: Presently we are considering a Fall 2021 start date. The construction of Phase One improvements is anticipated to take 4-6 months, depending on weather and time of year. The start date will be contingent upon the MVC's approval of the amended DRI application, approval by the Oak Bluffs Planning Board and successful fund-raising efforts.*

I expect that MVC will place a condition on their DRI approval of the project that the final construction schedule be submitted to the MVC prior to the start of any construction activity on site.

19. Other phases are likely in future, and the master plan recommends more fields. How will that affect the funding, budgets, environmental impacts, etc.?

Response: The impact of future phases with regard to funding, budgets and environmental impacts would be the subject of a future DRI review process and would be required to comply with the permitting requirements in place at that time.

Thank you for your time and consideration. Please let me know if you have any questions or require any additional information to begin your review.

Sincerely;
Huntress Associates, Inc.

Christian C. Huntress
President

Cc: Matthew D'Andrea – MVPS Superintendent
Richard Smith – MVPS Asst. Superintendent
Kimberly Kirk – Chair, MVRHS School Committee
Joseph Sullivan – Daedalus Projects, Inc.

From: [Chris Huntress](#)
To: [Alex Elvin](#)
Subject: FW: MV - Disinfection Plan
Date: Tuesday, December 1, 2020 12:53:00 PM
Attachments: [image004.png](#)
[image005.png](#)
[image006.png](#)

Alex, please the response below from Greenfields regarding the recommended disinfectant plan. I will include this email in our written reply to staff questions.

Thanks, please let me know should you have any further questions.

Chris
Christian C. Huntress, RLA
President

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From: Veditz, Colin <c.veditz@tencategrass.com>
Sent: Monday, November 23, 2020 3:28 PM
To: Curran, Mark <m.curran@greenfieldsusa.com>
Subject: RE: MV - Disinfection Plan

Mark,

This is acceptable. We should note that the use of alcohol should be used for spot cleaning only.

-Best,

Colin Veditz
Installations Quality Control Manager/Project Manager
Tencate Grass America
1131 Broadway Street
Dayton, TN 37321
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From: Curran, Mark <m.curran@greenfieldsusa.com>
Sent: Monday, November 23, 2020 3:02 PM
To: Gallaher, Avery <a.gallaher@greenfieldsusa.com>
Cc: Huard, John <j.huard@geosurfaces.com>; Veditz, Colin <c.veditz@tencategrass.com>
Subject: FW: MV - Disinfection Plan

Please see below. I don't see any red flags. As they are asking about warranty, I thought you should review.

Thanks, Mark

From: Chris Huntress <chris@huntressassociates.com>
Sent: Monday, November 23, 2020 11:40 AM
To: Curran, Mark <m.curran@greenfieldsusa.com>
Subject: MV - Disinfection Plan

***** INFORMATION: This is an external mail originating outside the TenCate Grass mail system.**

Mark, The MVC staff has requested that we share with you our response to their questions regarding field disinfection plan and confirm if the following plan or applications would have any impact to Greenfield's warranty.

In addition to the following protocols, we are recommending spot cleaning with water and isopropyl alcohol for limited use in areas where blood, vomit or other bodily fluids are spilled on the field.

MVC Staff Question: Provide a more detailed disinfection plan to account for COVID19 and other viruses. A review of industry-based disinfection guidelines suggests spraying a disinfectant (products based on manufacturers recommendations) on the field after each use. The disinfection plan should include proposed products (such as mPerial), equipment needed, and application frequency in order to better evaluate the cost implications and any potential for groundwater contamination from active ingredients.

Response: Recommended disinfectant plans for youth sports, school and recreational facilities should follow the guidelines established by the Center for Disease Control (CDC). HAI is encouraging our clients to continue to follow the recommendations of the CDC for disinfecting all school facilities, including athletic fields, running tracks, tennis courts and playgrounds. Specifically, the CDC recommends schools and youth sports organizations consider

implementing several strategies to maintain healthy operations, as outlined below.

- **Cleaning and Disinfection**

- Clean and disinfect frequently touched surfaces on the field, court, or play surface (e.g., drinking fountains) at least daily, or between uses as much as possible. Use of shared objects and equipment (e.g., balls, bats, gymnastics equipment) should be limited, or cleaned between use by each individual if possible.

- **Shared Objects**

- Discourage sharing of items that are difficult to clean, sanitize, or disinfect. Do not let players share towels, clothing, or other items they use to wipe their faces or hands.
- Make sure there are adequate supplies of shared items to minimize sharing of equipment to the extent possible (e.g., protective gear, balls, bats, water bottles); otherwise, limit use of supplies and equipment to one group of players at a time and clean and disinfect between use.
 - Keep each player's belongings separated from others' and in individually labeled containers, bags, or areas.

- **Modified Layouts and Social (Physical) Distancing**

- Identify adult staff members or volunteers to help maintain social distancing among youth, coaches, umpires/referees, and spectators (if state and local directives allow for spectators).
- Space players at least 6 feet apart on the field while participating in the sport (e.g., during warmup, skill building activities, simulation drills)
- Discourage unnecessary physical contact, such as high fives, handshakes, fist bumps, or hugs.
- Prioritize outdoor, as opposed to indoor, practice and play as much as possible.
- Create distance between players when explaining drills or the rules of the game.
- If keeping physical distance is difficult with players in competition or group practice, consider relying on individual skill work and drills.

- **Physical Barriers and Guides**

- Provide physical guides, such as signs and tape on floors or playing fields, to make sure that coaches and players remain at least 6 feet apart.

- **Communal Spaces**

- Close shared spaces such as locker rooms, if possible; otherwise, stagger use and clean and disinfect between use.

- *Limit the number of players sitting in confined player seating areas (e.g., players benches) by allowing players to spread out into spectator areas if more space is available (e.g., if spectators are not allowed).*

The above information is a sample of the facility recommendations provided by the CDC. Additional information may be found at:

<https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/youth-sports.html#environments>

Thanks for your help. An response via email would suffice for our needs.
Please let me know if you have any questions.

Chris

Christian C. Huntress, RLA
President

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