



April 9, 2019

TO: Park Board Chair and Commissioners
FROM: General Manager – Vancouver Board of Parks and Recreation
SUBJECT: Playing Field Upgrades – Synthetic Turf & Lighting

RECOMMENDATION

- A. THAT the Vancouver Park Board approve the installation of a synthetic turf playing field and lighting at Sir Winston Churchill Secondary School, on the existing grass playfield/diamond adjacent to West 57th Avenue, pending approval of a shared-use agreement with the Vancouver School Board;
- B. THAT the Park Board approve the installation of outdoor lighting at the following two locations:
 - i. Hillcrest Park on the existing mini synthetic turf playing field.
 - ii. Kitsilano Secondary on the existing synthetic turf field, pending approval of a shared-use agreement with the Vancouver School Board.

REPORT SUMMARY

In October 2017, the Park Board endorsed Beaconsfield Park, Clinton Park, and Sir Winston Churchill Secondary school for consideration as potential sites for a new synthetic turf playing field. This report provides a summary of the subsequent engagement results which support the installation of a new synthetic turf playing field and lighting at Sir Winston Secondary School, and installation of lighting at existing synthetic turf fields in Hillcrest Park and at Kitsilano Secondary School. In response to public feedback received regarding Clinton and Beaconsfield parks, consideration of any new synthetic turf playing fields in Vancouver parks has been paused while staff develop a new expanded engagement process that will include establishing an advisory group as part of a more holistic city-wide planning approach.

POLICY / PREVIOUS BOARD DECISIONS

As per the [Vancouver Charter](#), the Park Board has exclusive jurisdiction and control over park land use in the City of Vancouver, including any structures, programs and activities, fees, and improvements that occur within parks. Section 489.1 of the Charter outlines the Board's power to provide for "accommodation for sports and games, and spectators thereof, and setting aside and reserving portions of the parks for specified kinds of sports and games". Major changes to parks or portions thereof require Board approval.

The 2015-2018 Capital Plan outlined the Park Board's previous capital spending program. The Capital Plan included an allocation of \$2M for synthetic turf playing field upgrades and construction, which was not spent and remains available.

On October 2, 2017, the Park Board approved the [Synthetic Turf Playing Field – New Site Options](#) report recommendations to “endorse Beaconsfield Park, Clinton Park, and Sir Winston Churchill Secondary school for consideration as the potential site for a new synthetic turf playing field to be funded by Citywide Development Cost Levy (DCL) Funds, subject to further technical review and a public process”.

The 2019-2022 Capital Plan outlines the Park Board’s current capital spending program. The Capital Plan includes an allocation of \$5.4M for the construction of new synthetic turf playing fields and \$4M for replacing existing synthetic turf fields.

BACKGROUND

The Vancouver Park Board began installing synthetic turf playing fields in 1986 and now manages 11 facilities on both Park Board and Vancouver School Board sites (see Appendix A).

- Andy Livingstone Park (2 fields)
- Trillium Park (2 fields)
- Hastings Park - Empire Fields (2 fields)
- Vancouver Technical Secondary
- Jericho Beach Park
- Memorial South Park
- Kerrisdale Park / Point Grey Secondary
- Oak Meadows Park
- Hillcrest Park (mini field) and Challenger Baseball Diamond
- Kitsilano Secondary* (*opened in 2018, no shared use agreement in place yet*)

As shown in Table 1 below, Vancouver currently has the lowest provision of synthetic turf playing fields of all municipalities in Metro Vancouver with populations greater than 100,000 residents.

Table 1: Synthetic Turf Playing Field Provision in Metro Vancouver, ranked lowest to highest

Municipality	2016 Population	# of Synthetic Turf Fields	# of Synthetic Turf Fields per 100,000 residents
Vancouver	631,486	12	1.9
Surrey	517,887	15*	2.9
Burnaby	232,755	8	3.4
Coquitlam	139,284	5	3.6
Richmond	198,309	8	4.0
Langley(City + Township)	143,173	7*	4.8
Delta	102,238	5*	4.9
North Vancouver (District + City)	138,833	7*	5.0

** including future synthetic turf projects approved or currently under construction*

The Vancouver Park Board and Vancouver School Board cooperatively manage existing facilities on Vancouver School Board property, including the synthetic turf fields at Vancouver

Technical Secondary, Eric Hamber Secondary, and Point Grey Secondary/Kerrisdale Park. This arrangement is detailed in shared use agreements that articulate schedules, obligations, administration, and allowable uses. Typically, the School Board provides the land and has sole use of the fields from early morning until 5pm on school days. The Park Board generally builds and maintains the fields and then programs them for use by residents outside of school hours.

Synthetic turf fields are important to municipalities because, when lit, they provide up to four times the play time of a natural turf field. This translates to 105 hours a week of use (including approximately 48 hours at prime time – evenings and weekends). Grass fields can only provide a maximum of 12-14 hours a week of use and require seasonal downtime to ensure recovery and adequate field quality. Lit synthetic turf fields provide longer daily playable hours, do not require seasonal closures for rest and repair, and are rarely closed due to extreme weather. With limited availability of large flat sites, synthetic turf fields provide efficient land use and reliability for urban residents.

Soccer, field hockey, ultimate, football, rugby, lacrosse, and cricket are demonstrating a significant need for more access to synthetic turf fields. Current utilization rates range from 91% to 100% during peak times. Needs and expectations are also growing due to:

- expanding membership within existing sports groups and clubs;
- new sports emerging with growing membership;
- extended traditional sport seasons causing overlap (e.g., spring soccer leagues, longer ultimate seasons);
- schools requesting higher use of community fields;
- current uneven distribution of quality fields across the city;
- reduced acceptance for using gravel, all-weather playing fields due to safety concerns;
- changing climate conditions impacting natural turf condition and playability (drier summers and wetter winters), as well as new threats from pests such as European Chafer and Japanese Beetles.

Increasing Demand for Playing Fields

The 'Sport for Life' philosophy, as articulated in the Park Board's 2008 [Sport Strategy](#), advocates for facilities and participation by people of all ages and abilities, from beginners through to elite training and sport hosting venues. This strategy, together with True Sport Principles and the [Canadian Sport for Life's Long Term Athlete Development Framework](#), aims to support lifelong engagement with sport.

Expanding synthetic turf fields in Vancouver responds to the goals of the Sport Strategy by increasing year-round access to facilities for a growing population that places a high value on healthy and active lifestyles. Per the Sport Strategy, 70% of Vancouver's residents are physically active, compared to just 49% nationally.

Sport touches many aspects of Canadians' lives—their health and well-being, their social networks, their sense of social connectedness. Organized sport can help children grow, giving them a sense of achievement while building teamwork, leadership, problem-solving, decision-making, and communications skills. Sport also enables children to channel their energy, competitiveness and aggression in socially beneficial ways. Improving health through sport and other forms of physical activity may reduce future health-care costs and build lasting habits of physical fitness while combating the growing problem of childhood obesity. (Canadian General Social Survey 2008)

In Canada, there is a trend of declining participation in sport, particularly youth sports, and this trend is most significant for those from low-income families. Providing facilities that expand opportunities for all ages and abilities is an important part of reversing this trend locally, specifically for those facing barriers such as new immigrants and lower income families.

Synthetic Turf Materials

The ongoing synthetic turf field evaluation process includes an in-depth review of materials. Demand for synthetic turf products continues to grow worldwide in response to a growing population seeking out more durable, low maintenance surfaces with limited watering requirements. Products are continually changing in response to the needs of both users and municipalities. The project team has begun evaluating options and availability of products, as well as gathering information about performance and results from human health impact studies.

Park Board staff work closely with Vancouver Coastal Health (VCH) on projects that may raise concerns about health impacts, including sharing product research. The VCH Chief Medical Health Officer provided a letter outlining the most up-to-date public health recommendations regarding synthetic turf fields (included as Appendix A in the October 2017 [Synthetic Turf Playing Fields report](#)). This collaborative practice will continue for future recommendations on synthetic turf surfacing materials.

Vancouver Field Sports Federation

The [Vancouver Field Sports Federation](#) (VFSF) is a city-wide community organization specifically created to work with the Vancouver Park Board and staff to develop, maintain, and schedule the use of sport field facilities. The Federation's membership includes organized baseball, football (tackle, touch and flag), cricket, field hockey, field lacrosse, rugby, soccer, softball, track and field, ultimate (disc sports), and volleyball leagues, and represents over 40,000 adults and youth who play field sports in Vancouver.

The VFSF members contribute approximately \$1.5M on an annual basis to the Park Board through user fees, and some groups have also contributed significant funding towards capital projects over the past few decades¹.

Collaboration with the VFSF has resulted in ongoing productive dialogue with a unified group of users regarding the planning, use, and maintenance of field facilities. The VFSF provides recommendations to the Park Board on facility needs, types, and locations based on input from all members. Park Board staff rely on this input along with other public engagement initiatives to implement Park Board plans and initiatives, such as the [Playing Field Upgrades Project](#).

DISCUSSION

In August 2017, in response to a request for suggestions from Park Board staff, the VFSF recommended Beaconsfield Park, Clinton Park, and Sir Winston Churchill Secondary school for consideration as the potential site for a new synthetic turf playing field. These three locations were approved by the Park Board for further review and public engagement.

Public Engagement

As part of the technical review and public process, Park Board staff held several events in November 2018 to engage with the public and gather feedback on possible new synthetic turf

¹ Information provided by the Vancouver Field Sports Federation, April, 2019.

playing fields at Beaconsfield Park, Clinton Park, and Sir Winston Churchill Secondary School. In addition, staff also sought public feedback on the potential installation of permanent lighting at the existing synthetic turf fields at Kitsilano Secondary School and the mini field at Hillcrest Park.

Following are the 2018 Playing Field Upgrades Project engagement events:

- November 8, Kitsilano Community Centre;
- November 19, Hillcrest Community Centre;
- November 20, Trout Lake Community Centre;
- November 25, Italian Cultural Centre; and
- November 29, Churchill Secondary School.

An online survey was also conducted to gather feedback from users and residents on the potential playing field upgrades. Over 2300 responses were received. All five sites received between 55% and 70% support.

The proposal for a new synthetic turf field at Clinton Park garnered the least support; concerns included potential impacts to other park users and the neighbourhood. The Sir Winston Churchill Secondary site received the most support (72% of respondents were supportive or neutral). During the open house, at the Parent Advisory Committee presentation, and in comments provided in the survey, the community of teachers, parents, and students of Churchill Secondary showed strong support for adding a synthetic turf field at the school.

Regarding lighting, the fields at Hillcrest Park and Kitsilano Secondary both received strong support, with 85% and 80% of respondents very supportive, supportive or neutral.

The full engagement summary is attached as Appendix B.

New Synthetic Turf Playing Fields – Expanded Engagement Process

In response to public input received through the recent engagement process, staff recommend proceeding with the new synthetic turf facility at Sir Winston Churchill Secondary, and adding lights to the two existing synthetic turf fields. Considerations for other synthetic turf fields would then follow an expanded engagement process.

Regarding other new synthetic turf playing field locations, public feedback highlights the need for a holistic park review process as part of planning significant changes to park facilities. Staff will form a new public advisory group to consider potential new synthetic turf locations. This advisory group will take a city-wide approach and provide feedback on potential locations, impacts and mitigation options for existing and new amenities, infrastructure, environmental aspects, and parking.

Based on this revised approach, staff will work with the VFSF and the new playing field advisory group to reconsider potential Beaconsfield Park and Clinton Park locations, and evaluate all proposed sites put forward by the VFSF.

The expanded engagement process will include two steps for current and future synthetic turf facilities:

1. A simplified process for projects on Vancouver School Board properties (e.g., Churchill Secondary) and projects proposing only lighting on existing synthetic turf fields (e.g., Hillcrest Park and Kitsilano Secondary); and
2. A broader and more comprehensive process to undertake a full park review for potential addition of new synthetic turf facilities to Park Board sites, (e.g. Clinton and Beaconsfield Parks) supported by public engagement and the new advisory group.

Further analysis undertaken as part of this process, including site surveys, arborist assessment, geotechnical review, lighting review, and surface material review will be evaluated and considered through the expanded public engagement process, and will inform the detailed planning at Sir Winston Churchill and the lighting plans for Hillcrest Park and Kitsilano Secondary. These documents will also accompany the final report when it is presented to the Board for decision in Spring 2020.

NEXT STEPS

Staff will work with the Vancouver School Board to develop detailed designs and solicit contractor bids to install lights at the two existing un-lit synthetic turf fields and a new synthetic turf field at Churchill Secondary. Additionally, staff will develop a shared-use agreement outlining how the Park Board and School Board will work together to build, maintain, and program the facilities.

Park Board staff will strike a synthetic playing field advisory group including residents and field sport users. The advisory group will consider service levels, sustainability goals, and technical analysis, and will support the broader public engagement process for siting new synthetic turf facilities in Vancouver parks. Staff will work with the advisory group, residents, and the Vancouver Field Sport Federation to develop concepts and recommendations for new synthetic turf playing field sites by Spring 2020.

CONCLUSION

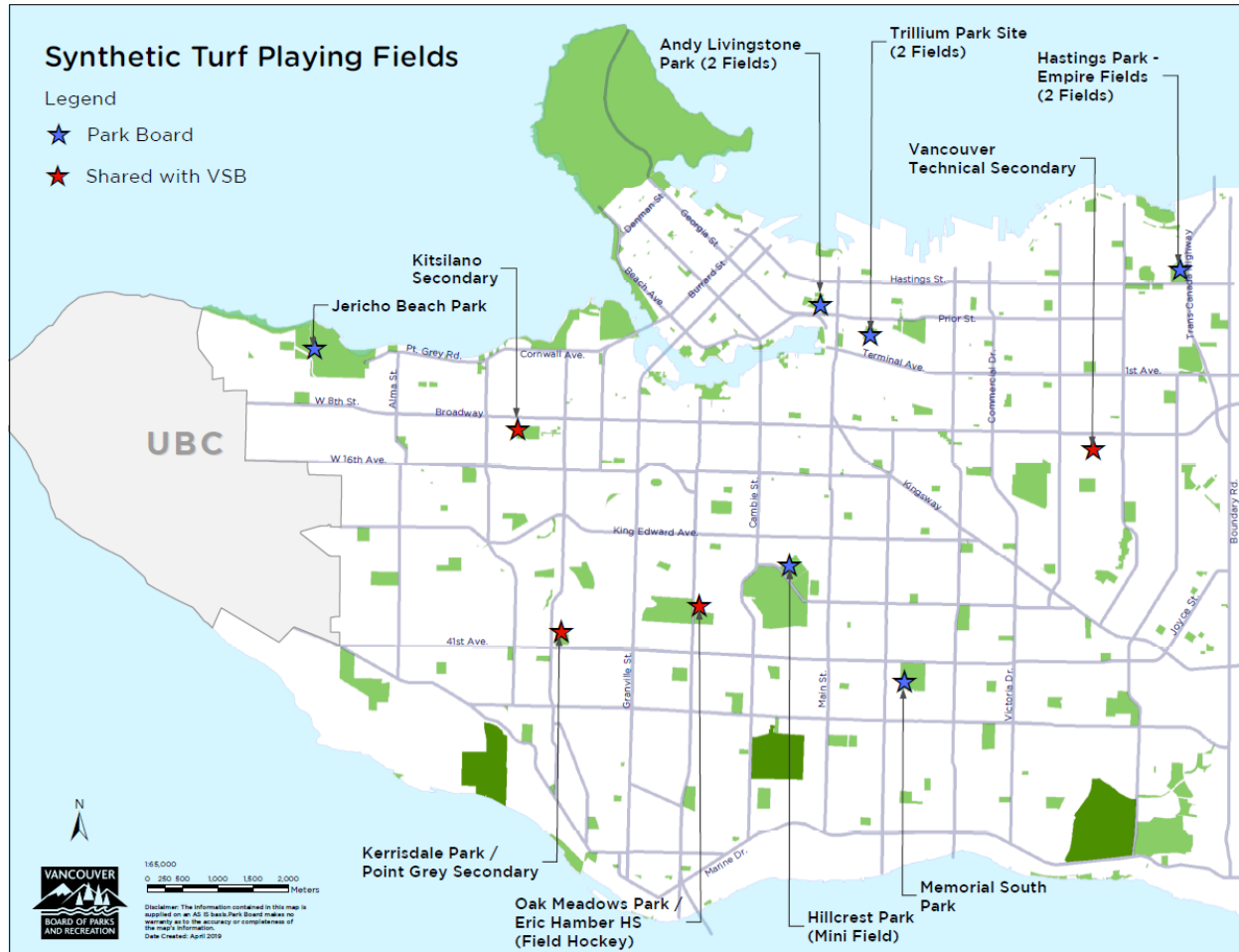
Staff recommend that the Board support adding lights to the existing synthetic turf playing fields at Hillcrest Park and Kitsilano Secondary, as well as installing a new synthetic turf playing field with lights at Sir Winston Churchill Secondary, as supported by the ongoing technical review and public process as outlined in this report.

General Manager's Office
Vancouver Board of Parks and Recreation
Vancouver, BC

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/ee/ds/clc

Synthetic Turf Fields – Citywide Map



SYNTHETIC TURF ENGAGEMENT SUMMARY FALL 2018



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SUMMARY

The Vancouver Park Board is working with the Vancouver School Board to meet the needs of Vancouver residents and field sports users in the City.

Through the engagement process to date, respondents indicated support for upgrading and expanding synthetic turf fields in Vancouver. Based on the questions asked, the greatest support for a new synthetic turf field is at Sir Winston Churchill Secondary, and the least support at Clinton Park. Respondents also support adding lights to the existing fields at Kitsilano Secondary and Hillcrest Park. Specific feedback from the public centered around a desire for equitable access to synthetic turf fields city-wide, concerns around environmental and human health impacts and impacts to neighbourhoods and other park amenities at the sites under consideration.



PLANNING PROCESS

The Vancouver Board of Parks and Recreation is aiming to increase the number of synthetic turf fields in Vancouver. Due to increasing demand on Vancouver's existing synthetic turf fields, the Park Board in cooperation with the Vancouver Field Sport Federation identified a number of potential locations to add synthetic turf and lighting to increase capacity. Four sites for a new field were chosen and approved for further analysis by the Board at their October 2, 2017 Board Meeting.

- Beaconsfield Park (the all-weather gravel field)
- Clinton Park (the all-weather gravel field and mixed surface field to the west)
- Sir Winston Churchill Secondary (two sites, the south field and the field inside the track)

During summer of 2018 Park Board staff hired a consulting team to support an expanded project scope that included considering adding lighting to the existing fields at Hillcrest Park and Kitsilano Secondary. Staff began engaging the public in late fall of 2018 seeking to understand their level of support for a new facility at each of the four sites short listed for review.

The planning team will consider feedback from this engagement, along with technical information, to develop recommendations for the planning, design, and management of Vancouver's synthetic turf facilities for Park Board review and approval.

Who is the VFSF?

The Vancouver Field Sports Federation (VFSF) is a not-for-profit organization that represents the interests and knowledge of most of the amateur sport associations that play on the City's fields. It was formed in the 1980's by sport associations to help improve field conditions. The focus of this umbrella federation is to share information and coordinate efforts to maintain and improve playing field conditions in the city. In conjunction with the Vancouver School Board and the Vancouver Park Board, the VFSF has been very active in supporting maintenance and capital improvements to playing fields.



BACKGROUND

Vancouver has 286 playing fields, including regulation-size and mini grass fields, gravel or all-weather fields, and 12 synthetic turf fields (including one mini synthetic turf field). Demand is high for field space for soccer, field hockey, ultimate, football, rugby, and many other sports, and synthetic turf allows for 105 hours of use each week (approximately 48 hours at prime time), compared to grass fields that operationally can only sustain a maximum of 12-14 hours a week and require seasonal downtime to ensure adequate field quality.

The Vancouver Park Board (VPB) and the Vancouver School Board (VSB) jointly provide almost all the available playing fields in Vancouver and share common concerns with respect to aging infrastructure and growing public demand for service. Synthetic turf is used as an alternative to grass as it is more durable and accommodates much longer and more intense use, despite Vancouver's climate. Synthetic fields also require significantly less maintenance and upkeep as they maintain their even surface, do not require mowing or seeding, require much less water, and generally have life spans of 10 to 15 years with proper upkeep.

Staff worked collaboratively with representatives of the Vancouver Field Sport Federation (VFSF) and the Vancouver School Board (VSB) to create the shortlist of candidate sites which were presented to the Board for approval in September of 2017. The Vancouver Park Board approved further review of the four candidate sites for detailed evaluation. The approved sites are: The west gravel field at Beaconsfield Park, the southwest field at Clinton Park, the southwest field at Sir Winston Churchill Secondary School, and the field inside the east track at Sir Winston Churchill Secondary School.

Two of the four sites are located at Sir Winston Churchill Secondary School which is owned and operated by the VSB. The VSB partnered with the Park Board on three existing synthetic turf installations: Eric Hamber, Point Grey (Kerrisdale Park), and Vancouver Technical Secondary Schools. Synthetic turf fields at secondary school sites are efficient, as students use fields during non-peak school hours and local sports groups have access during peak times without any impact on existing shared park spaces.



ENGAGEMENT APPROACH

The public engagement process included a survey and a series of open houses. The survey resulted in 2300 responses which largely supported the chosen sites. There were some concerns which centred primarily on the balance of other park uses, parking availability and the chemical composition of synthetic turf.

In the fall of 2018, Park Board staff began a public engagement process for the 3 chosen sites plus an additional two existing fields to install lighting. There were five open houses located in close proximity to each site and sought feedback via a questionnaire hosted on Survey Gizmo and available in hard copy at the open houses. The open houses took place at the following locations:

- November 8, 2018: Kitsilano Secondary (Lighting at Kitsilano Secondary Synthetic Turf)
- November 19, 2018: Hillcrest Community Centre (Lighting at Hillcrest Synthetic Turf)
- November 20, 2018: Trout Lake Community Centre (New Synthetic Turf at Clinton Park)
- November 25, 2018: Italian Community Centre (New Synthetic Turf at Beaconsfield Park)
- November 29, 2018: Churchill Secondary (New Synthetic Turf at Churchill Secondary)

The simple survey consisted of five site specific questions on whether they supported the proposal of synthetic turf in each location and to provide any comments. (Results included below)

Notification of the open houses and questionnaire were made through the following methods:

- Update on the website
- Home mail notifications within a 3-4 block radius of each location
- Social media campaigns on the VPB Facebook page (targeted to postal codes in those neighbourhoods) and tweets through the Park Board Twitter account.

By the end of the public engagement process, 2315 surveys were completed and a total of approximately 75 people came to the open houses.





WHAT WE HEARD

Topic: ACCESS

- Increased access to Synthetic turf fields is needed in Vancouver
- Consider equitable access to synthetic turf fields city-wide.

Topic: ENVIRONMENT & HUMAN HEALTH

- Consider and protect the natural environment when developing sythetic turf facilities, specifically issues related to migration of infill material and surface water contamination.
- Consider and protect human health when developing synthetic turf fields, consider urban heat islands and off-gassing of materials.

Topic: NEIGHBOURHOOD IMPACT

- Full consideration of impacts to all park infrastructure and neighbours is needed to ensure appropriate locations are chosen and mitigation approaches incorporated.

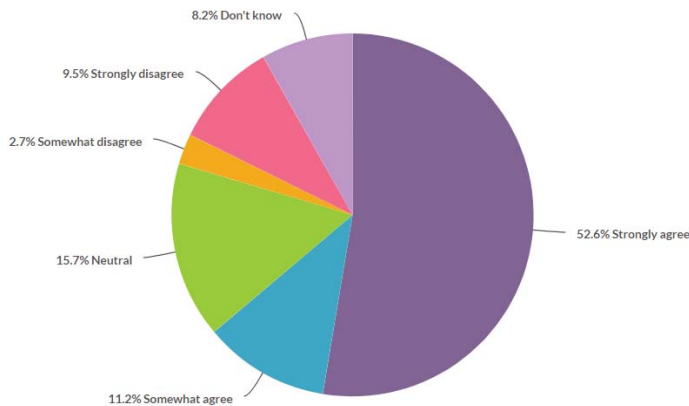




SUMMARY OF SURVEY RESULTS

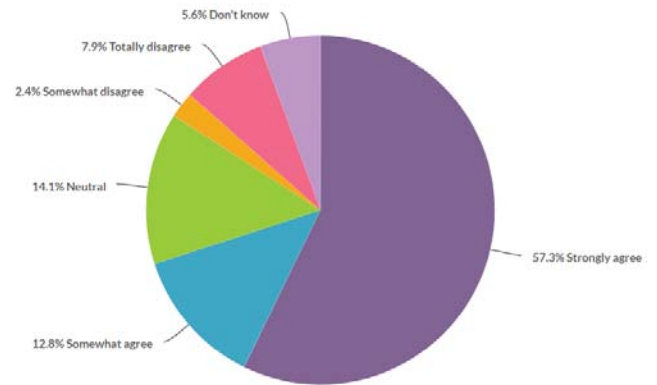
QUESTION 1:

- Tell us your level of agreement for lighting the synthetic turf field at Kitsilano Secondary:



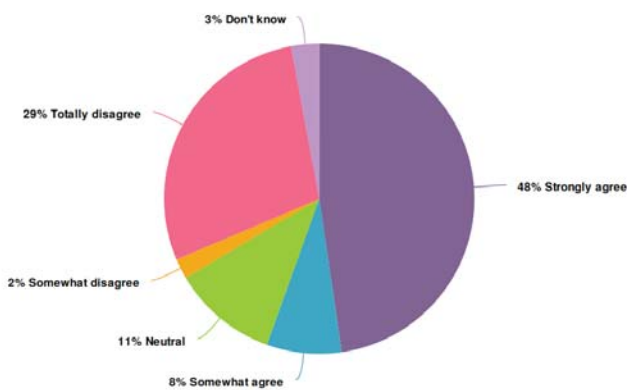
QUESTION 2:

- Tell us your level of agreement for adding lights to the existing synthetic turf field at Hillcrest Park?



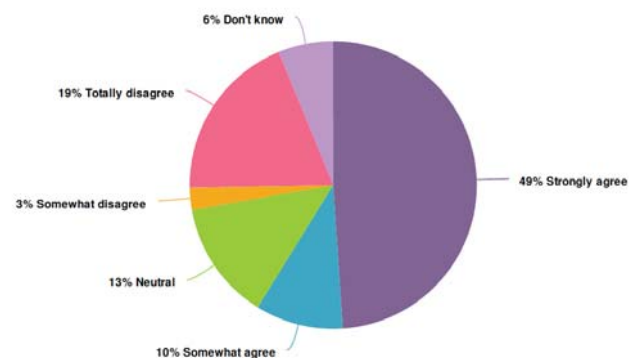
QUESTION 3:

- Do you agree or disagree with installing a new lit synthetic turf field at Clinton Park?



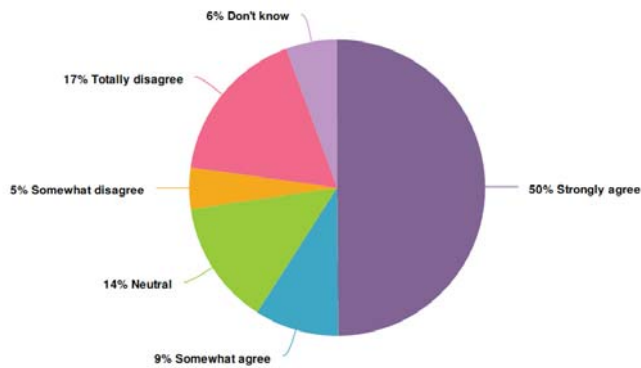
QUESTION 4:

- Do you agree or disagree with installing a new lit synthetic turf field at Beaconsfield Park?



QUESTION 5:

- Do you agree or disagree with installing new lit synthetic turf fields at Churchill Secondary?



DEMOGRAPHIC INFORMATION

- Which age group do you belong to?

Under 15	7.20%	170
15-19	4.90%	115
20-29	8.40%	197
30-39	16.70%	392
40-49	38.20%	898
50-59	17.20%	403
60-69	5.20%	123
70+	2.20%	51
Totals		2,349

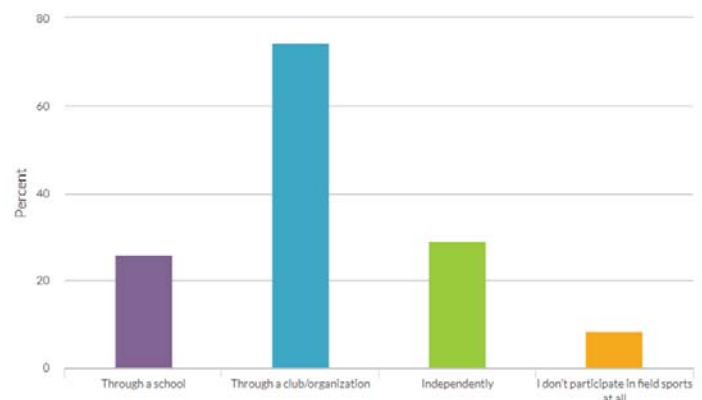
DEMOGRAPHIC INFORMATION

- Do you identify as:

Male	49.60%	1,171
Female	48.10%	1,137
Transgender	0.30%	6
None of the above	2.10%	49
Totals		2,363

DEMOGRAPHIC INFORMATION

- How do you participate (as an athlete, coach, parent or caregiver) in field sports?



APPENDIX 1: PRESENTATION MATERIALS

The boards below were presented to the public at the open houses and shown on the website alongside the survey. They give an overview of the project in addition to site specific illustrations of the fields under consideration.

Welcome

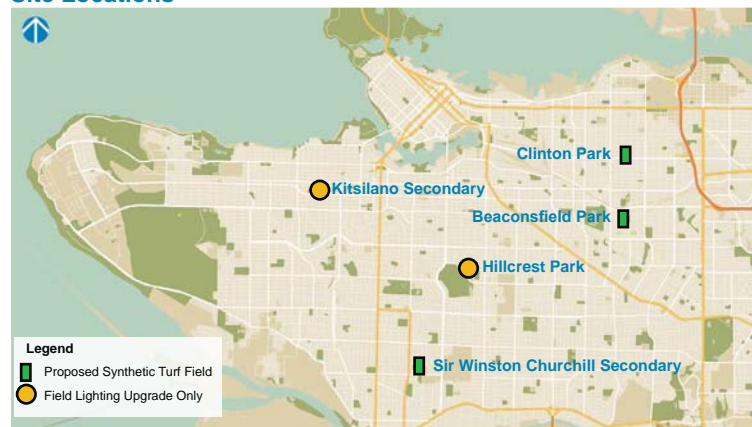
Purpose

The Vancouver Park Board wants to increase the supply of synthetic turf playing fields to meet the needs of field sport users in the city. Despite adding eight new synthetic turf fields over the past ten years, demand continues to exceed supply.

Lit synthetic turf fields can accommodate 50-80 hours a week of programming, while natural turf facilities can only accommodate 14 hours a week before activities damage the natural turf.



Site Locations



We Need Your Feedback

Through a series of open houses and an online survey, the Vancouver Park Board is asking the public to provide feedback on proposed locations in order to understand the level of support for synthetic turf fields at each location. Park Board staff will develop recommendations based on public input, technical and financial information. It is possible that none or all sites receive support for upgrades.

Please share your input on these synthetic turf field upgrades.

Vancouver Synthetic Turf Field Upgrades

November 2018



Background

Why Develop More Synthetic Turf Fields?

The Park Board is working with the Vancouver School Board and community organizations in upgrading and maintaining existing fields and developing new fields for school and public use city-wide. The full range of synthetic facility users will be considered, including competitive, recreational and persons of all abilities.

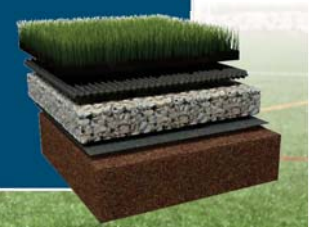
Increasing access and participation in field sports for Vancouver residents supports and aligns with:

- VanPlay Parks and Recreation Service Master Plan (on-going)
- Park Board Strategic Plan
- Vancouver Sport Strategy
- Vancouver Healthy Strategy
- Vancouver Fit for Life Strategy



Why Synthetic Turf?

Synthetic turf fields are durable and efficient facilities. They can accommodate extensive use and allow for greater intensity of use than natural turf facilities in Vancouver's wet climate. They require less maintenance with no need for mowing, seeding, fertilizing, or pest control and can last 10 years or more with proper care.



Vancouver Synthetic Turf Field Upgrades

November 2018



Users and Existing Field Usage

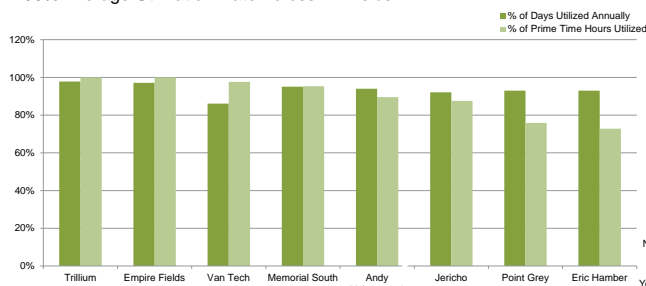
Quick Facts

- The first synthetic turf field in Vancouver was built in 1987 at Oak Meadows Park (next to Eric Hamber Secondary School)
- There are currently 11 full-size synthetic turf fields in the Vancouver Park Board inventory
- Vancouver Field Sport Federation and Vancouver Sport Network support the inventory and its growth
- Average life span of a synthetic turf field surface is 10-15 years

- Average life span of a natural grass field is 25-30 years but requires more intense maintenance
- Synthetic turf fields provide over 50-80 hrs/week of programming hours during fall and winter
- Natural turf fields provide a maximum 12-14 hrs/week of playable hours
- Over 90% of playable hours on a synthetic turf field are currently booked year-round in Vancouver

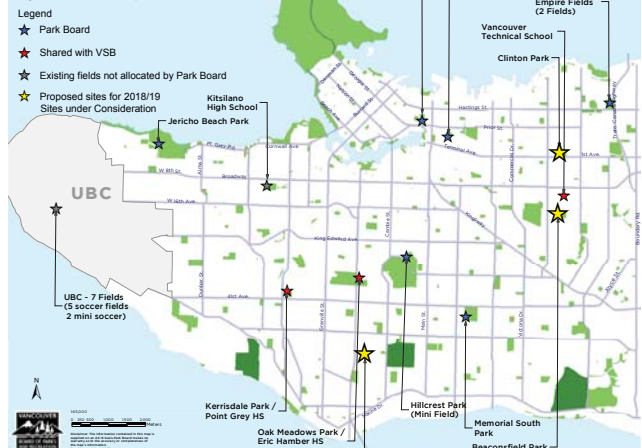
Background - Synthetic Field Utilization Rates 2016/17

90% Average Utilization Rate Across All Fields



Year Open:	2010	2015	2008	2010	1995	2010	2006	1987	2016
Year Replaced:					2009		2016	2003	
Replacement Year Target:	2020	2025	2019	2020	2019	2020	2026	2026	2026

Synthetic Turf - Sport Fields



Vancouver Synthetic Turf Field Upgrades

November 2018



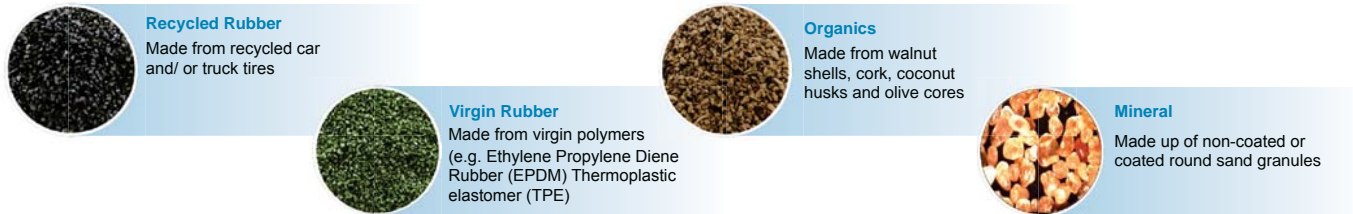
Types of Infill Considered

Infill is a loose granule material that is distributed across a synthetic turf field. It is brushed into the synthetic grass blades to:

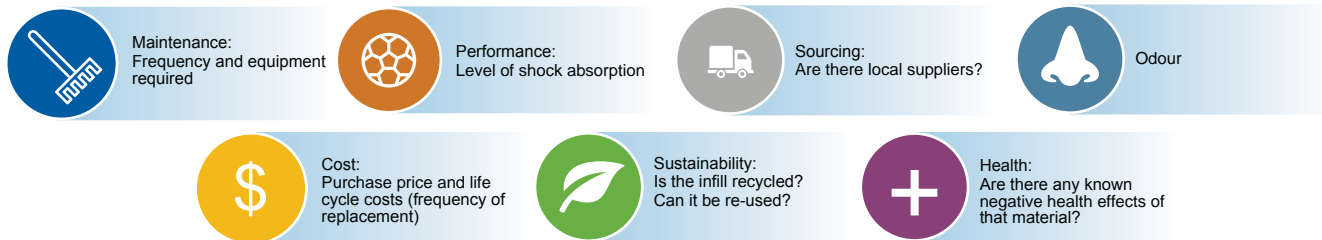
- help the fibers (grass blades) stand upright;
- weigh down and stabilize the turf carpet;
- and provide shock attenuation.

There are many types of infill available. They can be classified into four main categories: recycled rubber, virgin rubber, organics and mineral. The criteria shown below can help guide the decision making process for selecting infill material.

Infill Types



Selection Criteria



Vancouver Synthetic Turf Field Upgrades

November 2018



Site Evaluation Considerations



Vancouver Synthetic Turf Field Upgrades

November 2018



Sir Winston Churchill Secondary School- Central Field

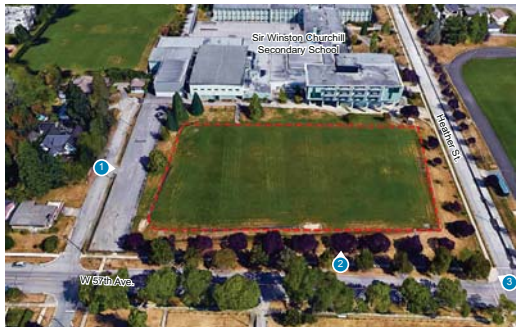
Site Information

Sir Winston Churchill Secondary School is located in south Vancouver and has a running track, ball diamond and three grass fields for school and community use.

Selection Considerations

- The Vancouver School Board supports having a synthetic turf field at high school sites
- Under-served and growing neighbourhood
- Good access by transit
- No publicly accessible washroom facilities; need school access or build a new facility
- No impact to trees or a need for retaining walls

Existing Site Condition



Proposed Synthetic Turf Field Concept



Site Photos



Vancouver Synthetic Turf Field Upgrades

November 2018



Sir Winston Churchill Secondary- Track

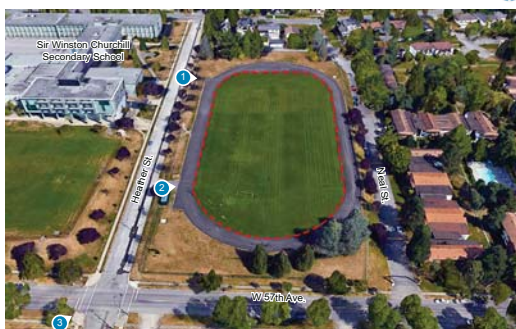
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- Under-served and growing neighbourhood
- Good access by transit
- No publicly accessible washroom facilities; need school access or build a new facility
- No impact to trees or a need for retaining walls
- This field would be the priority for implementation out of the two possible locations at Sir Winston Churchill Secondary School

Existing Site Condition



Proposed Synthetic Turf Field Concept



Site Photos



Vancouver Synthetic Turf Field Upgrades

November 2018



Clinton Park

Site Information

Clinton Park is a three-hectare neighbourhood park located in east Vancouver that provides amenities including a playground, wading pool, fieldhouse with washroom, ball diamond, lit all-weather field, and two natural grass fields with synthetic turf goal areas.

Selection Considerations

- Existing grass fields need upgrades to repair uneven ground and other surface irregularities
- Existing on-site washroom facilities
- Adjacent to a major road (E 1st. Ave.)
- Proximity of amenities and other fields make it a desirable tournament centre

Existing Site Condition



Proposed Synthetic Turf Field Concept



Site Photos



Vancouver Synthetic Turf Field Upgrades

November 2018



Beaconsfield Park

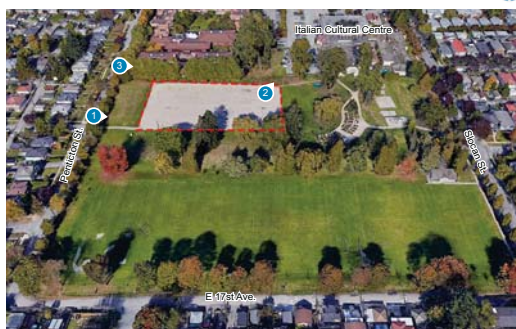
Site Information

Beaconsfield Park is a 4.4-hectare neighbourhood park located in east Vancouver, adjacent to the Italian Cultural Centre. Amenities include a playground, community garden, ball diamond, lit all-weather gravel field, fieldhouse and three grass fields.

Selection Considerations

- Proximity to amenities and other fields make it a desirable tournament centre
- Good access by transit with only an 8-minute walk from the SkyTrain
- Existing on-site washroom facilities

Existing Site Condition



Proposed Synthetic Turf Field Concept



Site Photos



Vancouver Synthetic Turf Field Upgrades

November 2018

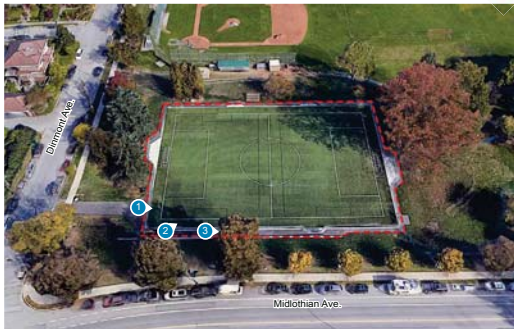


Hillcrest Park

Site Information

The synthetic turf mini soccer field at Hillcrest Park, located in central Vancouver, was completed in 2016. It was the first field in B.C. to successfully reuse synthetic turf re-purposed from another site. Existing site conditions and tree locations dictated the size of the field which accommodates "small sided" soccer games for a wide range of users. Following the success of the field, the City proposes to complete improvements with the addition of lighting to extend the usable playing time.

Existing Site Condition



Existing Synthetic Turf Field



Legend

- 1- Proposed Field Lights
- 2- Existing Mini Soccer Field (54mx36m)

Site Photos



Vancouver Synthetic Turf Field Upgrades

November 2018



Kitsilano Secondary School

Site Information

The synthetic turf soccer field at Kitsilano Secondary School located on the west side of Vancouver was completed in 2018 shortly following the completion of renovations to the school in 2017. The field is used for soccer and field hockey. The Park Board is considering adding lights to extend the playable time for field users. The school would use the site during the day Monday to Friday and the Park Board would rent the space on evenings and weekends.



Existing Site Condition



Existing Synthetic Turf Field



Legend

- 1- Proposed Lights
- 2- Soccer
- 3- Field Hockey

Site Photos



Vancouver Synthetic Turf Field Upgrades

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Field Lighting

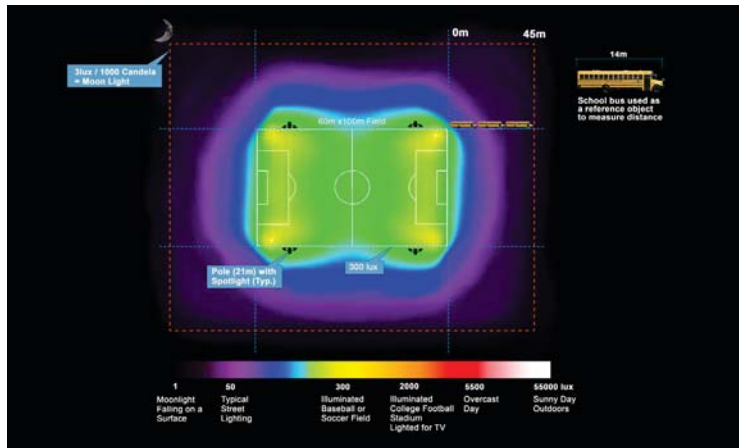
What Do We Want to Do?

- Extend programming hours for field users
- Improve experience and safety for field users
- Consider energy efficiency

Managing Light Spill

- International Dark Skies Association (IDA) Dark Skies compliant
- Manage high angle glare to reduce off-site light trespass and sky glow
- Reduce spill and glare into neighbouring areas

Visualization of Light Levels



Existing Field Example



Lighting Technology Advancements



Vancouver Synthetic Turf Field Upgrades

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