

Feasibility Report

Bear Creek Park Destination Sports Facility

Issued: April 2020



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PROJECT CONSULTANTS

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HCMA Architecture + Design

HCMA

Landscape:
LEES & Associates

LEES
+
ASSOCIATES

Civil:
Aplin Martin

 **APLIN MARTIN**
ENGINEERING ARCHITECTURE PLANNING SURVEYING

Traffic:
Bunt & Associates Engineering Ltd.

Quantity Surveyor:
Ross Templeton + Associates

ROSS TEMPLETON
+ ASSOCIATES

1.0 Executive Summary

1.0 Executive Summary

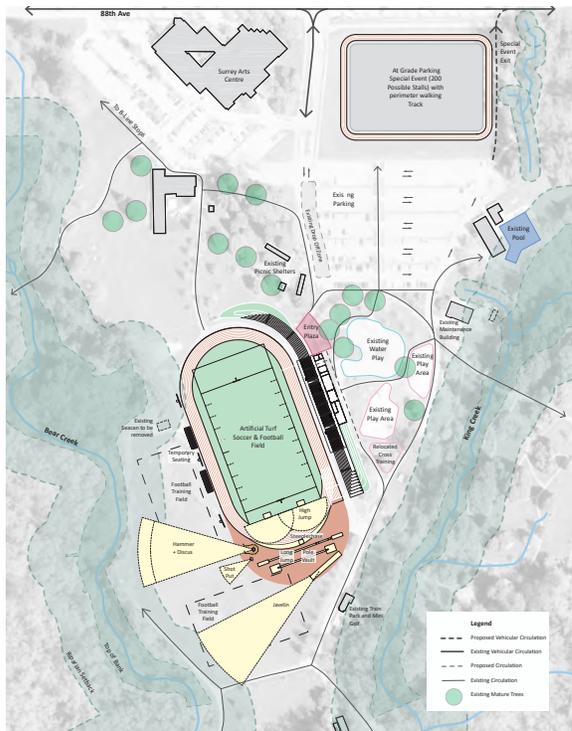
BACKGROUND

The current track and field facilities located in Bear Creek Park have served the community well, but are aging and currently unable to meet the needs of a growing population and an increasingly diverse range of users including track and field users, various athletic stakeholder groups, and general park users - all of whom have expressed an interest in an expanded range of amenities.

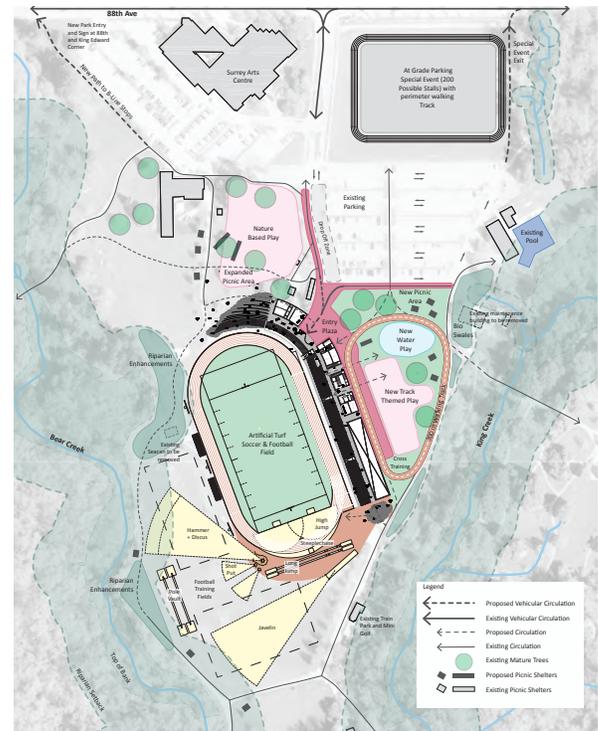
As a result, the City of Surrey engaged HCMA Architecture + Design in early 2019 to lead a design team including landscape, traffic/parking, and civil consultants, to undertake a feasibility study to explore the planning and conceptual design of a new destination sports facility at Bear Creek Park.

The vision for the project, developed and refined during the study, is a revitalized sports facility that will enhance Bear Creek Park by creating a vibrant, athletic destination that is carefully integrated into the fabric of the park, maintains the much loved natural environment, and connects the unique range of existing park experiences. The proposed facility is intended to provide enhanced services to current users, and to draw new users to experience this unique offering within the lower mainland.

The feasibility study resulted in two proposed schemes. The first referred to as the **Base Case** includes a proposed facility that will replace the existing track to international standards, providing accommodation for a full range of track and field sports including javelin, discus, shot put, long jump and triple jump. The new facility will be designed to support sport and community event hosting and will replace the existing wooden bleachers with a modern 2,200 seat grandstand with covered seating. The proposed facility will provide change room and public washroom facilities to serve all of Bear Creek Park. The second scheme is referred to as the **Base Case Enhanced**. The enhanced scenario provides additional site upgrades, parking amenities, and expanded building program spaces that are over and above the Base Case to meet the full aspirations of the community as identified during the community engagement.



▲ Base Case: Overall park concept design



▲ Base Case Enhanced: Overall park concept design

DISCUSSION

The feasibility report is a necessary document to ensure a project of this scale is well planned and is a good candidate for grant funding requests from senior levels of government. A key component of the feasibility report was a regional context review of existing and proposed future track and field facilities, which provided an understanding of the nature and scale of training and hosting facilities in the region and identified potential service gaps. This review was also informed by a precedent review that looked at track and field athletic centres around the world, providing perspective on global trends that could enhance the programming opportunities for the proposed new Bear Creek Park facility. This work informed the programming and strategic approach taken to differentiate the proposed Bear Creek Destination Sports Facility as a unique offering in the region.

The next step in the work was to develop the programmatic elements for the Sports Facility, and to test them with stakeholders, after which the approach to the siting and design of the building was developed. Ultimately, the proposed new Destination Sports Facility focuses on meeting all the required training and hosting needs of the sport user groups; enhancing the park as a whole by using the proposed new Sports Facility as an opportunity to strengthen relationships between existing amenities; and offering new amenities as part of the new Sports Facility. Key strategies for differentiating the Bear Creek Destination Sports Facility include:

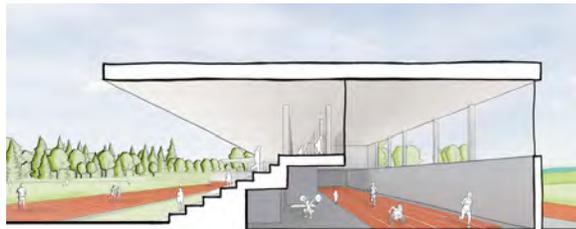


▲ Base Case: Sectional perspective of grandstand field facilities

Base Case: Siting and design to provide new park amenities and to enhance existing amenities

- Located within a destination park with a wide range of natural and built amenities, Bear Creek Park draws users from Surrey and Metro Vancouver, which provided an opportunity to consider the new facility as something that enhances and gives back to Bear Creek Park. Through careful grading and orientation of the entry, an animated public plaza unites the Sports Facility to the wider park year-round, scaled to support track and field and community events. The spectator seating is designed to provide seating capacity for 2,200 through dedicated covered viewing bleachers that are blended with softer landscaped social seating with good solar orientation that integrates into the park, bringing picnickers into the space on non-event days and providing an enhanced social seating option within the park. The location of the public washrooms and change rooms provides an opportunity for servicing the wider park.

In the Base Case Enhanced scheme the new public washrooms and change rooms would support both the facility and the proposed new track and field themed play zone and new water play park.



▲ Base Case Enhanced: Sectional perspective of the grandstand and indoor 80 meter rubberized track

Base Case Enhanced: Indoor 80 meter rubberized track

- by analyzing the other regional facilities, seeing precedents for indoor tracks that provide year round training opportunities, and through discussions with stakeholders, the potential to differentiate the service offering at the proposed new Sports Facility by providing a year-round indoor training opportunity was identified. This formed the rationale for the Base Case Enhanced scheme to include an indoor 80-meter rubberized track with associated indoor fitness training and equipment storage into the proposed new Sports Facility.

PUBLIC ENGAGEMENT

The City of Surrey wanted to understand the interests and preferences of residents and stakeholders of Bear Creek Park as a whole, as well as dedicated users of the playing field and track and field facilities. To do so, three phases of public engagement were carried out. The first phase included interviews with key stakeholders and City of Surrey staff, which was summarized and shared with the design team to inform the early phases of the design explorations. The second phase was intended to define community values and needs. This phase included a public survey and additional stakeholder interviews that informed the selection of the program components and site concept development. The third and final phase included a public open house on October 1st, 2019 at Bear Creek Park where the Base Case Enhanced concept was presented, and the associated community feedback form was used to gather input.

Through all forms of engagement, we heard a few recurring themes:

- Residents and stakeholders are both excited for the new amenities and the increased opportunities to use them.
- The residents especially are interested in improving the other amenities in the park.
- Among the concerns that we heard most, parking and traffic was the most common, followed by environmental impact to the forest and creeks in the park.

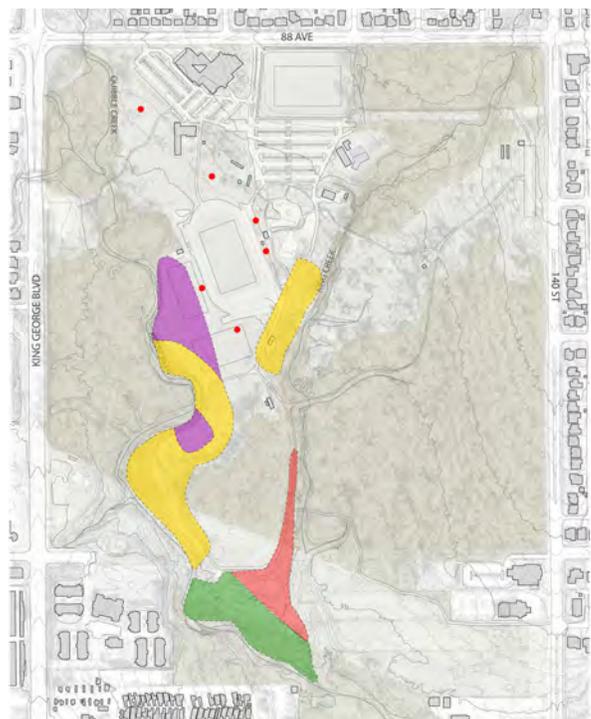
A summary of the engagement findings can be found in Section 2.0 of this report.

SITE CONSTRAINTS

The site analysis included in the study developed an understanding of the opportunities and limitations to locating the new sports facility in Bear Creek Park. The boundaries of the riparian setbacks, in conjunction with the geotechnical soil conditions, resulted in the proposal to locate the new facility on the existing site of the 400 meter track. The park was previously the location of a landfill and that left minimal opportunity for relocating of the facility from the existing footprint. The orientation of the track and the spectator seating are driven in part by the primary vehicle access to the site from 88th Ave., making the approach for the majority of users from this direction. This informed the location of the entry plaza, which provided an opportunity to create a new and significant entry condition for the proposed new Sports Facility.

PROGRAM

The proposed program in both the Base Case and Base Case Enhanced schemes for the overall park improvements and the Sports Facility were informed by input from key stakeholder groups, analysis of best practice precedents, and an analysis of regional track and field facilities. As discussed above, the intent was to determine an approach that could meet existing and future needs, and that would differentiate the facility from other regional facilities. The program is divided into site upgrades and a building program. The following summarizes the approximate site upgrades and building program for the Base Case scheme and identifies the specific features that are unique to the Base Case Enhanced scheme:



▲ Old landfill sites and soil conditions diagram

Base Case: Site Program Features

- A new replacement track to international standards, providing accommodation for a full range of track and field sports.
- A new replacement artificial turf field that can host high level football and soccer games with enhanced spectating opportunities. The artificial turf can significantly increase the use of the field on a daily basis and year-round as it can be used regardless of the weather.
- A walking track provides a crucial role in athletics hosting as it doubles as a warm-up facility that is required by large events.
- A minimal plaza with an adjacent drop-off area forms the entry to the new facility.

Base Case Enhanced: Site Program Features

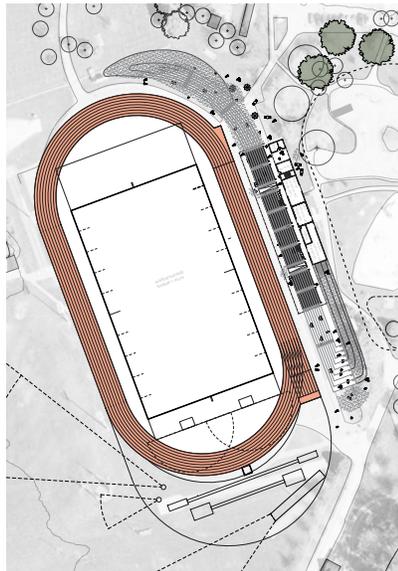
- New track themed playground, nature based playground, and new waterpark to replace existing amenities that are nearing 20 years old.
- Expanded parking, drop-off area, and plaza creating a new hardscaped public space for community scale events and to support large regional scale hosted events.
- Added mist features in the plaza to meet the needs of athletes and general park users on hot summer days.
- New picnic area in addition to riparian and environmental enhancements.

Base Case: Building Program Features

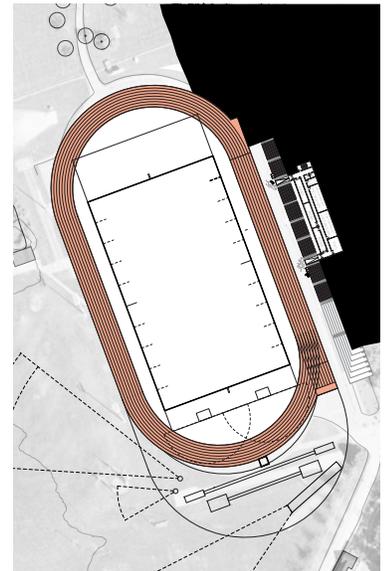
- The grandstand includes permanent seating for 2,200 with the option to expand to approximately 3,200 with temporary bleachers on the west side.
- There are two team changerooms and storage for community based sporting.
- There are public washrooms, change facilities, and a concession to improve facilities for the general public.

Base Case Enhanced: Building Program Features

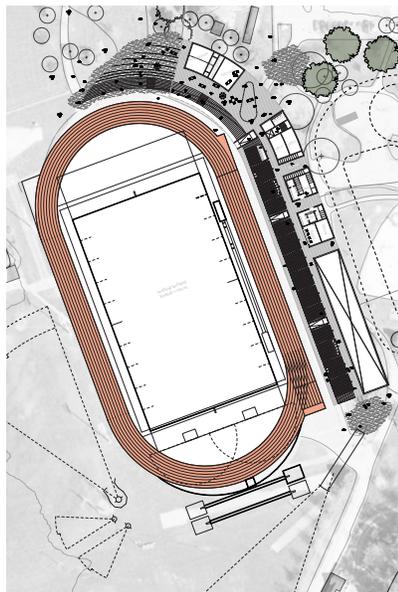
- Expanded team and training facilities including an indoor 80-meter rubberized track to provide unique event hosting and training opportunities for athletics.
- Indoor training including weight equipment and other amenities to support a high-level training centre.
- Two additional team changerooms providing four in total, ideal to host high level community based sporting events.
- There is a multi-purpose room that can be used by athletic groups and the general public.
- Maintenance facilities to replace the existing aging facilities.



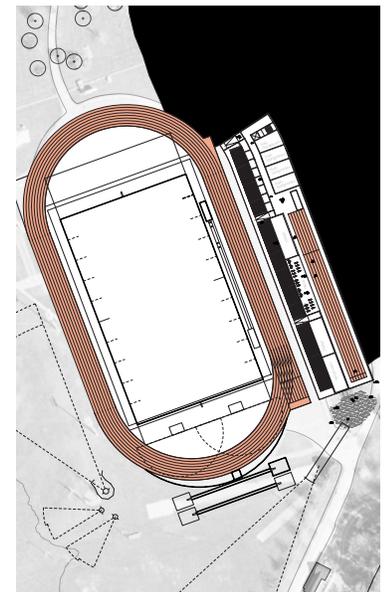
▲ Base Case: Upper level plan



▲ Base Case: Lower level plan



▲ Base Case Enhanced: Upper level plan



▲ Base Case Enhanced: Lower level plan

PARKING

Through the various forms of engagement, parking was identified as a key topic of interest for residents and stakeholders. Traffic consultants Bunt & Associates conducted a traffic and parking study including on-site surveying. The project is proposing to provide special event parking over the existing sports field along 88th Avenue, with the hard surface of the parking designed with fixtures, lighting, paint and equipment to support athletic activities to occur day to day, outside of peak parking times. In addition, a special events vehicle exit is being proposed east of the walking track to assist in traffic flow out of the site at the conclusion of events. More detail on parking and access is provided in Section 4.4.

SUSTAINABILITY

Sustainability is a key goal and the proposed facility includes the following measures to improve its performance: LED high mast lighting, increased areas for stormwater management, increased areas of natural area plantings to enlarge the King, Quibble and Bear Creek biodiversity corridors. In the Base Case Enhanced scheme a green roof is provided.

CAPITAL COSTING ANALYSIS

It is anticipated that the complete Base Case project costs will be approximately \$21 million and the complete Base Case Enhanced cost will be approximately \$44 million. The estimates are based on a preliminary class D estimate conducted in the spring of 2020. In addition the costing breaks up the additional costs associate with the Base Case Enhanced scheme into a series of site upgrades and additional building program. These estimates includes typical contingencies that are reflective of the early stage of the project development and assumes a construction start in the year 2022. Further details of the costing can be found in the Cost Estimate Report.

NEXT STEPS

The objective of the feasibility process was to understand strategies to differentiate this facility from other regional facilities, and to produce a building program and concept option that has been guided by public input and tested through analysis of the site and context. The information contained within this report can be used to make key decisions for the future progression of this project and should be used as the basis for the commencement of schematic design.

ADDITIONAL REPORTS

The following reports were created as a part of the feasibility study and informed the proposed concept.

- Parking and Transportation Study
- Civil Concept Design
- Cost Estimate Report
- Environmental Report
- Geotechnical Report
- Engagement Report
- Program Summary



▲ Base Case: Concept rendering of the proposed destination sports facility

2.0 Engagement Summary

2.1 Engagement Summary

2.1 Engagement Summary

OVERVIEW

As part of the feasibility study, the City consulted with stakeholder groups and the general public in order to understand the needs of user groups and the community at large.

The engagement and communications activities were conducted in three phases:

- + **Phase 1 (Spring 2019)**
Interviews with key stakeholders of the park
- + **Phase 2 (Summer 2019)**
Define the community values and needs associated with the regional facility
- + **Phase 3 (Fall 2019)**
Report back on how community input has informed recommended conceptual design option, and seek input on the proposed design solution

Through the different types of engagement we heard a few recurring themes. Residents and stakeholders are both excited for the new amenities and the increased opportunities to use them. The residents especially are interested in improving the other amenities in the park. Among the concerns that we heard most, parking and traffic was the most common, followed by environmental impact to the forest and creeks in the park.

PROGRAMMATIC OPTIONS

Seven external stakeholder groups were consulted, North Surrey Minor Football, Surrey Environmental Partners, Universal Athletics, South Fraser Track Club, Airblastoff Track Club, BC Athletics, and Charmaine Crooks – NGU Consultants. Four internal stakeholder groups were also consulted, Park Operations staff, Arts Centre and Children's Festival staff, Special Events staff and the Special Projects Manager. These consultations took place between January and April of 2019 and provided insight into how deficiencies with the current facility can be addressed.

The most common theme from the stakeholders was ensuring the facility is built to facilitate the logistics and administration of large events. This includes:

- At least four changerooms
- Fully accessible facility, especially the washrooms.
- An official's room
- A media room
- An operations/result room
- A medical room
- A large storage space with convenient access to the track
- A press box for announcers and commentators
- Set boundary to limit access during ticketed events
- Concession that can serve a fully attended event

**OVER 1850
RESPONSES**

950+ RESPONSES



CITYSPEAKS PANEL
July 3 - July 29 2019

890+ RESPONSES



**OPEN COMMUNITY
SURVEY**
July 3 - July 29 2019

52%

Visit the park at least
once a month

Lighting was also important to most stakeholders. Most want lighting to be increased, except for Surrey Environmental Partners who are concerned about the effects of light pollution on the wildlife in the park. Athletics groups asked for consideration of photo finish equipment on the track which requires a stable base on the inside of the track as well as power.

North Surrey Minor Football did not indicate a desire for natural or artificial turf as both have benefits and drawbacks for them, but BC Athletics noted that natural turf is required for throwing events like javelin and hammer throw, so if the final design wants the throwing events to happen within the track the turf will need to be natural grass.

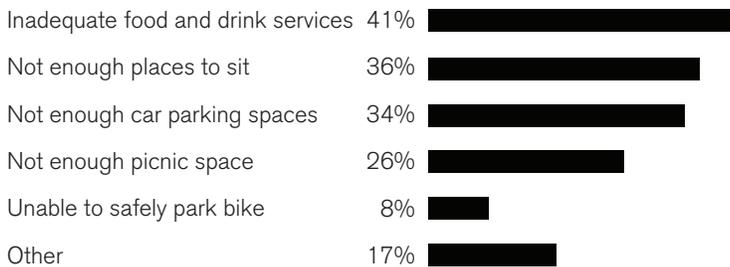
Near the conclusion of the feasibility study, the City met with Universal Athletics and BC Athletics to discuss the layout and locations for track & field events. This was done to ensure that future plans are fully compliant with IAAF and Para Athletic standards.

RESIDENT ENGAGEMENT

Consultation with residents was done in two stages. In July 2019 the City surveyed 1,852 people using the City Speaks panel and an open community survey. 94% of respondents were Surrey residents with 72% of respondents reporting they are users of Bear Creek Park. Track & Field use was identified as the third most common reason for visiting the park, behind only walking and experiencing the green space. 85% of respondents said they usually arrive by car and 2% said they typically have difficulties parking, while 26% said that “it depends.”

Once they are in the park, respondents indicated that the most common (41%) barrier encountered at the park is inadequate food and drink services. Following this, 36% said not enough places to sit, 34% not enough parking spaces and 26% not enough picnic spaces.

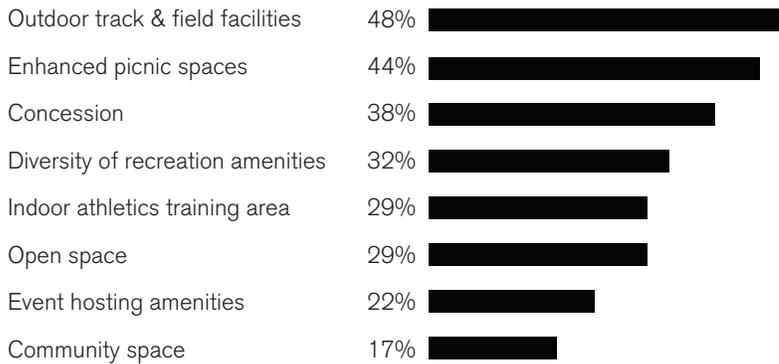
BARRIERS ENCOUNTERED AT BEAR CREEK PARK



Total participants: 1293

When residents were asked which amenities they thought would best serve the community they chose: outdoor track & field and spectator seating (48%), enhanced picnic space (44%), concession (38%), diversity of recreation amenities (32%), indoor athletics training area (29%), event hosting amenities (22%) and indoor community space (17%).

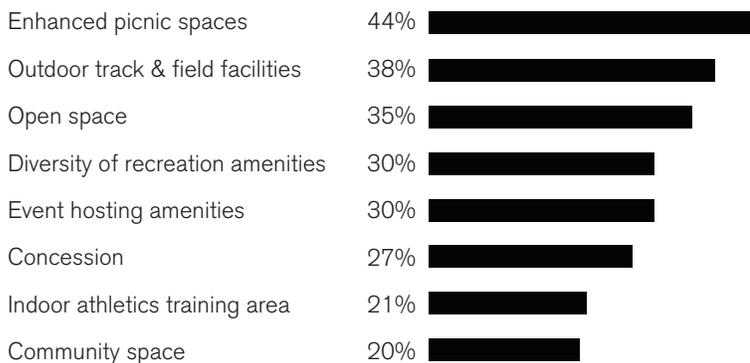
PERCEIVED COMMUNITY NEEDS



Total participants: 1247

The survey also asked what people wanted to see in a new athletic facility. 55% of respondents chose at least one amenity. The top responses were: enhanced picnic spaces (44%), outdoor track & field facilities and spectator seating (38%), open space (35%), diversity of recreation amenities (30%), event hosting amenities (30%), concession (27%), indoor athletics training area (21%) and indoor community space (20%).

ENCOURAGING MORE USE



Total participants: 523

The second stage of resident engagement was a public open house held on October 1st, 2019 in the Surrey Arts Centre in Bear Creek Park. It was attended by approximately 40 people and the City received 16 surveys based on the information presented at the open house. 12 of these surveys were in support of the facility, with 3 against it. One survey was neither in support nor against. A common theme in these surveys was support for recreational facilities to help keep people active, especially targeted for youth. Also, concerns about effects on the neighbourhood such as traffic, parking, noise and the natural environment were noted.

NOTES

Stakeholders

North Surrey Minor Football

No strong preference for natural or artificial turf.
Want 4 changerooms
Fencing to limit access for ticketed events
Construction displacement planning needed
Lighting for new walking track to divert users already listed above

Surrey Environmental Partners

Don't remove any forest for parking
Light pollution
Off-leash dogs in cleared areas only

Universal Athletics, South Fraser Track Club and Airblastoff Track Club

Prefer natural turf
Space for bleachers for larger events
Fencing for ticketed events
Indoor gym for training
Power for photo finish equipment as well as opposite the stands as some meets have 2 finish lines simultaneously.
Internet connection + wifi

BC Athletics

4 change rooms. Gender neutral/all gender change rooms and washrooms
Accessible for people using wheelchairs and visually impaired
Medical treatment room
Storage for T&F at track grade, large garage type door for easy loading.
Rooms for officials
Concession area
PA system
Press box for announcing/commentators. Media room.
Camera locations for streaming events
Event operations/results room
Training facilities

Lighting for track and field areas
Covered concourse for spectators and training/warm-up
Fence for ticketed events
Photo finish infrastructure. Place to mount, power on both inside and outside of track
Accessible for emergency vehicles, loading equipment and maintenance vehicles.

Charmaine Crooks – NGU Consultants

Designed to host large scale track meets
Emphasize training infrastructure

Park Operations staff

Parking existing issue
Service access is essential
Update park shelters
600 amp service to field existing
Relocate outdoor fitness
Incentives from BC Hydro to retrofit existing lighting

Arts Centre and Children's Festival staff

Childrens festival could benefit from the venue
Meeting space encouraged
Address parking issues

Special Events Staff

Bus parking and drop off
Potable water
Increase power availability

Special Projects Manager

Would be popular if the park schedule will allow it.

3.0 Project Background

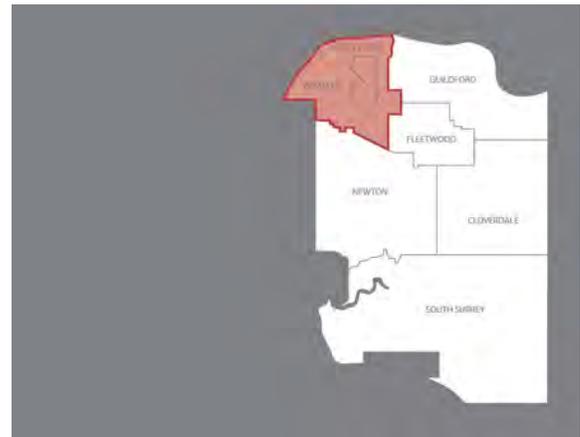
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3.1 Location

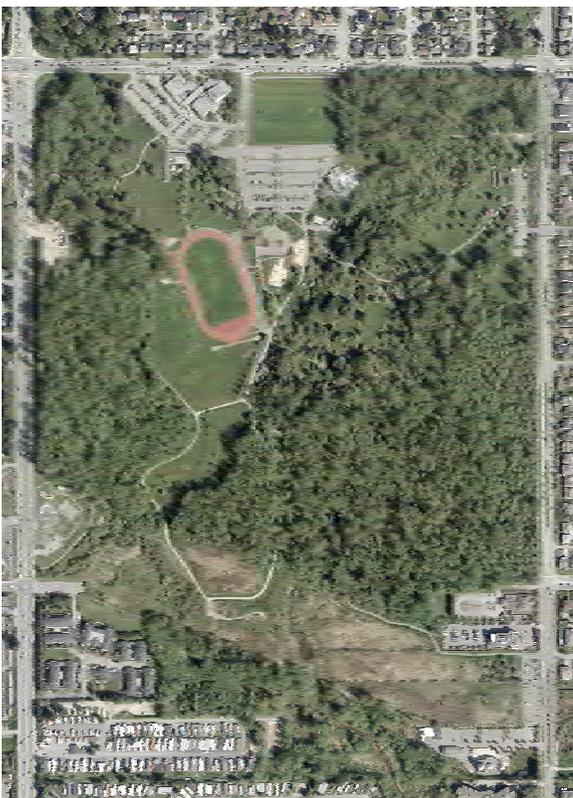
The current track and field facilities included in the feasibility study to explore the planning and conceptual design of a new destination sports facility are located in the City of Surrey, in the community of Whalley, and in the heart of the existing Bear Creek Park.



▲ City of Surrey



▲ Community of Whalley



▲ Bear Creek Park Aerial Image



▲ Bear Creek Park

3.3 Regional Context Analysis

A key component of the feasibility study was a regional context review of existing and proposed future track and field facilities, which provided an understanding of the nature and scale of training and hosting facilities in the region and identified potential service gaps. The following identifies the current regional track and field facilities located throughout the lower mainland.



Legend

- | | | |
|--|--|---|
| 1 UBC Dhillon track (Vancouver) | 3 Burnaby Central (Burnaby) | 5 Minoru Sports Complex (Richmond) |
| 2 Swangard Stadium (Burnaby) | 4 Percy Perry Stadium (Coquitlam) | 6 McLoed Stadium (Langley) |

Existing Regional Track & Field Facilities

1 UBC Dhillon track (Vancouver)

- Seating for 300+



2 Swangard Stadium (Burnaby)

- Seating for 4200



3 Burnaby Central (Burnaby)

- Small seating area



4 Percy Perry Stadium (Coquitlam)

- Seating for 1600, 200 standing and 300 external bleachers



5 Minoru Sports Complex (Richmond)

- Seating for 2000



6 McLeod Stadium (Langley)

- Seating for 2200



Future Regional Track & Field Facilities

The following identifies the future regional track and field facilities that are in various phases of planning and construction.



Legend

- | | | | |
|---|---|--|---------------------|
| 1 West Vancouver Secondary School (West Vancouver) | 3 South Delta Secondary School (Delta) | 5 Bear Creek Park Athletics Centre (Surrey) | 7 Abbotsford |
| 2 SFU Stadium (Burnaby) | 4 North Delta Secondary School (Delta) | 6 Maple Ridge Secondary Track (Maple Ridge) | 8 Chilliwack |

1 West Vancouver Secondary School (West Vancouver)

- Seating unknown
- Construction planned for 2020



2 SFU Stadium (Burnaby)

- Seating unknown
- Completion 2020



3 South Delta Secondary School (Delta)

- Seating unknown
- Date unknown

4 North Delta Secondary School (Delta)

- Seating unknown
- Date 2021



5 Bear Creek Park Athletics Center (Surrey)

- Seating for 2200
- Constructed 2020

6 Maple Ridge Secondary Track (Maple Ridge)

- Seating unknown
- Date unknown

7 Abbotsford

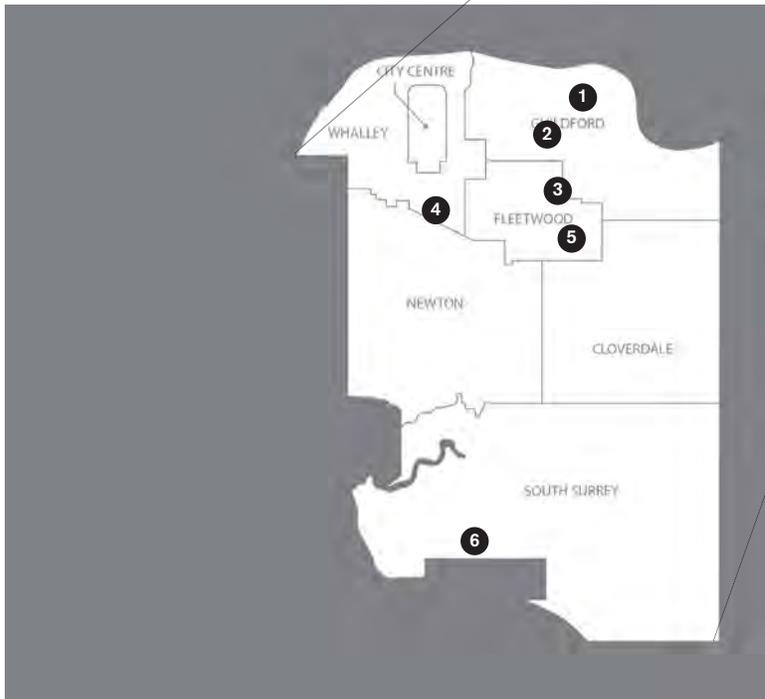
- Seating unknown
- Anticipated 2024-2028

8 Chilliwack

- Seating unknown
- Date unknown

Existing City of Surrey Track & Field Facilities

The following identifies the current track and field facilities throughout the City of Surrey. Aside from Bear Creek Park the remaining facilities are not considered regional as they provide minimal spectator seating or other related amenities. The majority of the existing facilities are also shared with schools.



Legend

- | | | |
|--|---------------------------------|-------------------------------------|
| 1 Pacific Academy Middle School | 3 Holy Cross High School | 5 William Watson Elementary |
| 2 North Surrey Secondary School | 4 Bear Creek Park | 6 South Surrey Athletic Park |

3.4 Precedent Analysis

A precedent review was conducted to review track and field athletic centres around the world, providing perspective on future global trends that could enhance the programming opportunities for the proposed new Bear Creek facility. This early foundational work informed the programming for the Base Case scheme and strategic approach taken to differentiate the proposed Bear Creek Destination Sports Facility as a unique offering in the region in the Base Case Enhanced scheme. The following summarize the precedents reviewed: spectator seating, informal seating, indoor track and field facilities, announcing and timing booths, plazas, concessions, multi-purpose rooms, field houses, changerooms, and washrooms.

FORMAL SPECTATOR SEATING

The formal covered seating needs to accommodate thousands of spectators and, depending on its configuration, can provide places to gather with views to the track.



▲ Parnu Stadium (Kamp Arhitektid, Estonia)

INFORMAL SPECTATOR SEATING

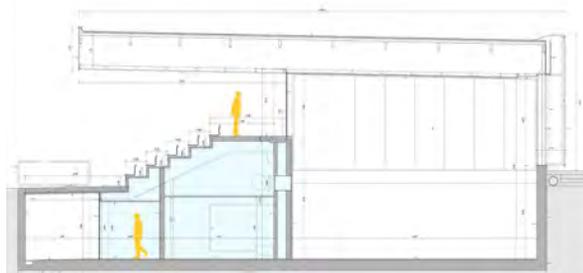
Apart from formal covered spectator seating, providing informal uncovered seats allow different events and situations to take place in the facility.



▲ Borregos Stadium (Arkylab & Mauricio Ruiz, Mexico)

INDOOR TRACK FACILITIES

Indoor track facilities offer all year training for all the users of the facility. The precedents show an interesting relationship between the seating area and the indoor training, allowing visual connection to the interior and bringing indirect natural light to the indoor track.



▲ Calvia Running Track (Niu Arquitectura, Spain)



▲ CAI Athletic Pavilion (GAP Architects, Spain)

TIMING BOOTH & ANNOUNCEMENT FACILITIES

Both timing and announcing booths are program pieces that need to be centrally located and glazed as shown in the following precedent.



▲ Athletics Manitoba Timing Booth (1x1 Architecture, Manitoba)

CHANGEROOMS & WASHROOMS

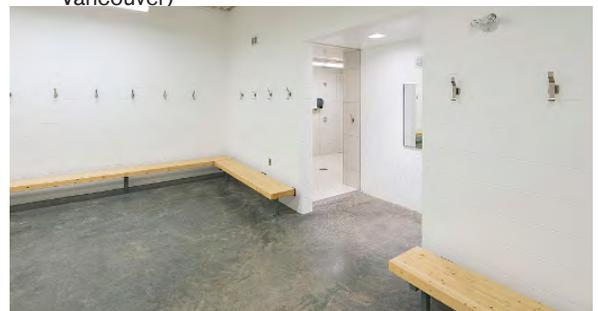
The public changerooms and washrooms need to be easily identified with clear signage as shown in the precedents.



▲ Centennial Beach Park Pavilion (Public, Delta)



▲ Norgate Park Field House (Carscadden, North Vancouver)



▲ Mill Woods Sport Park Pavilion (Dub Architects, Edmonton)

CONCESSION / MULTI-PURPOSE / FIELD HOUSE

The concession or multi-purpose is a social space. Transparency and a good location are important to offer good views of the track.



▲ Centennial Beach Park Pavilion (Public, Delta)

THEMED PLAY LANDSCAPE PRECEDENTS

The themed playgrounds use the same materiality and design that the track and field facilities to extend the footprint of the track and field, allowing informal plays to take place.



▲ Zhangmiao Exercise Park (Shanghai, China)

PLAZA AND MIST FEATURE

The plaza needs to accommodate not only the regular public but also host special events. A big open space is required to allow them to happen. A mist feature could be part of it.



▲ Athletics Exploratorium (Odense, Denmark)



▲ Lonsdale Friday Market (Vancouver)



▲ Example of mist

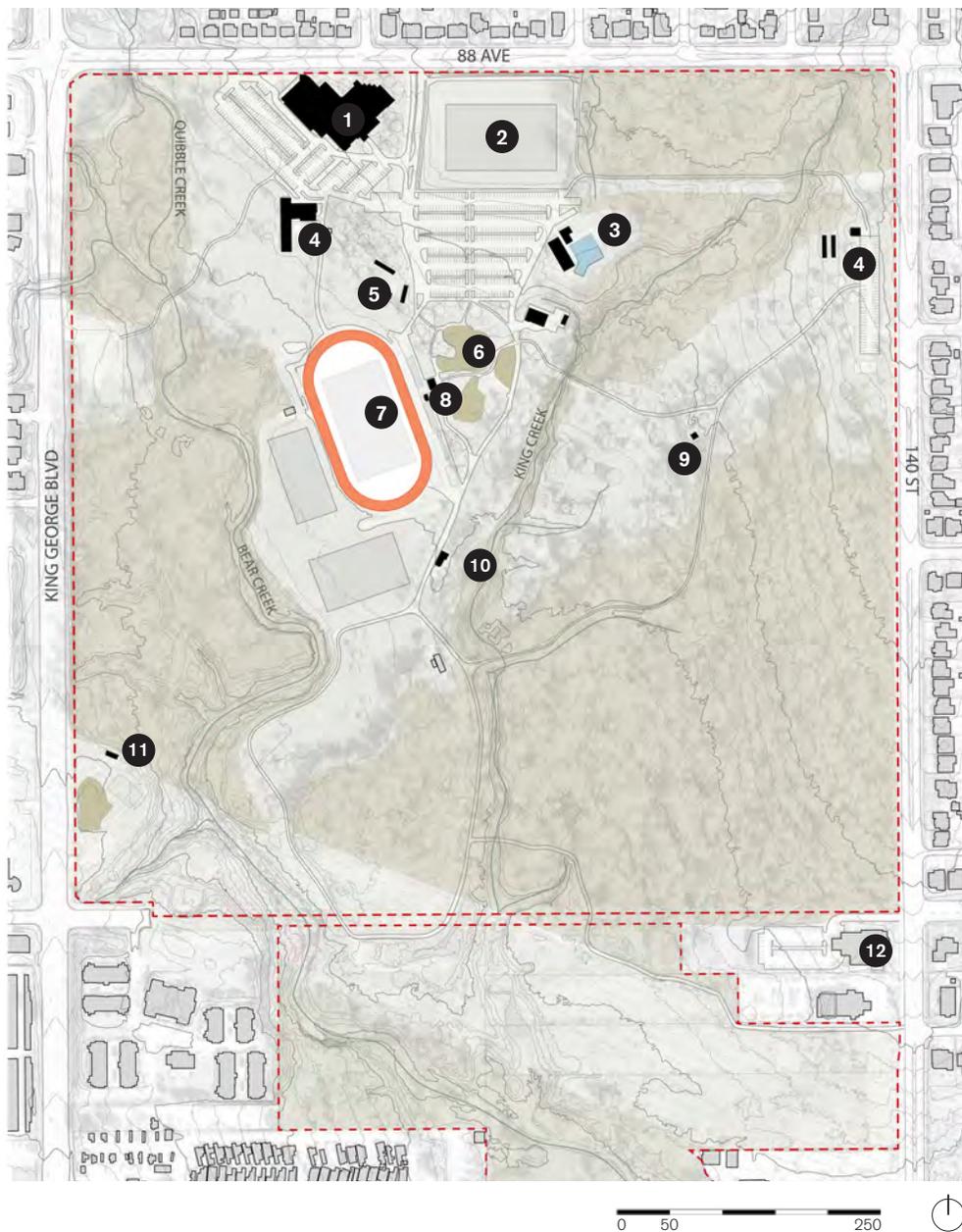
3.5 Site Analysis

EXISTING PARK AMENITIES AND CONSTRAINTS

The future destination sports facility in Bear Creek Park will be located where the existing track is situated in the centre of a vibrant park. The overall park is made up of a variety of amenities that range from civic facilities such as the Surrey Arts Centre, to structured athletic fields, to naturalized park settings for picnicking and walking.

LEGEND

- Park Boundary





1 Surrey Arts Centre



2 Sports Fields



3 Bear Creek Outdoor Pool



4 Bear Creek Pavilion



5 Picnic Shelter



6 Spray Park



7 Existing Track & Field Amenities



8 Public Washroom



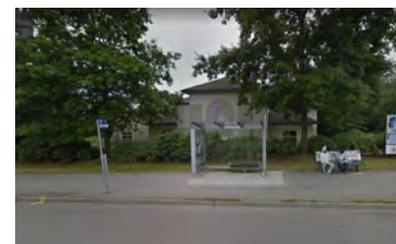
9 Chapel in the Woods



10 Bear Creek Train Park & Mini Golf



11 Skateboard Park



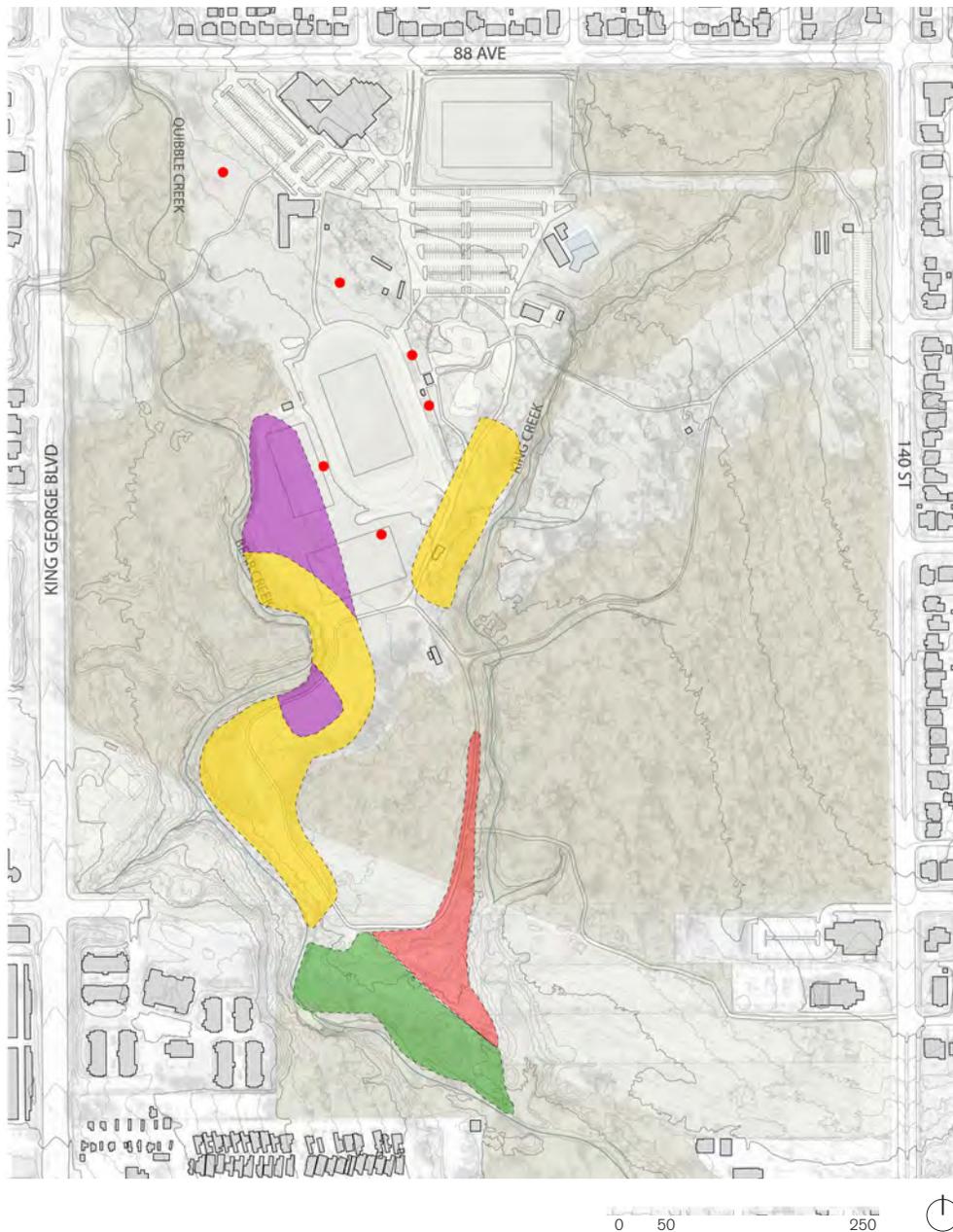
12 Bear Creek Community Church

OLD LANDFILL SITES AND SOIL CONDITIONS

The boundaries of the riparian setbacks, in conjunction with the geotechnical soil conditions, resulted in the proposal to locate the new facility on the existing site of the 400 meter track. The park was previously the location of a landfill and that left minimal opportunity for relocating of the facility from the existing footprint.

LEGEND

- 1954-1961
- 1966-1971
- 1961-1963
- 1963-1966
- Geotechnical points

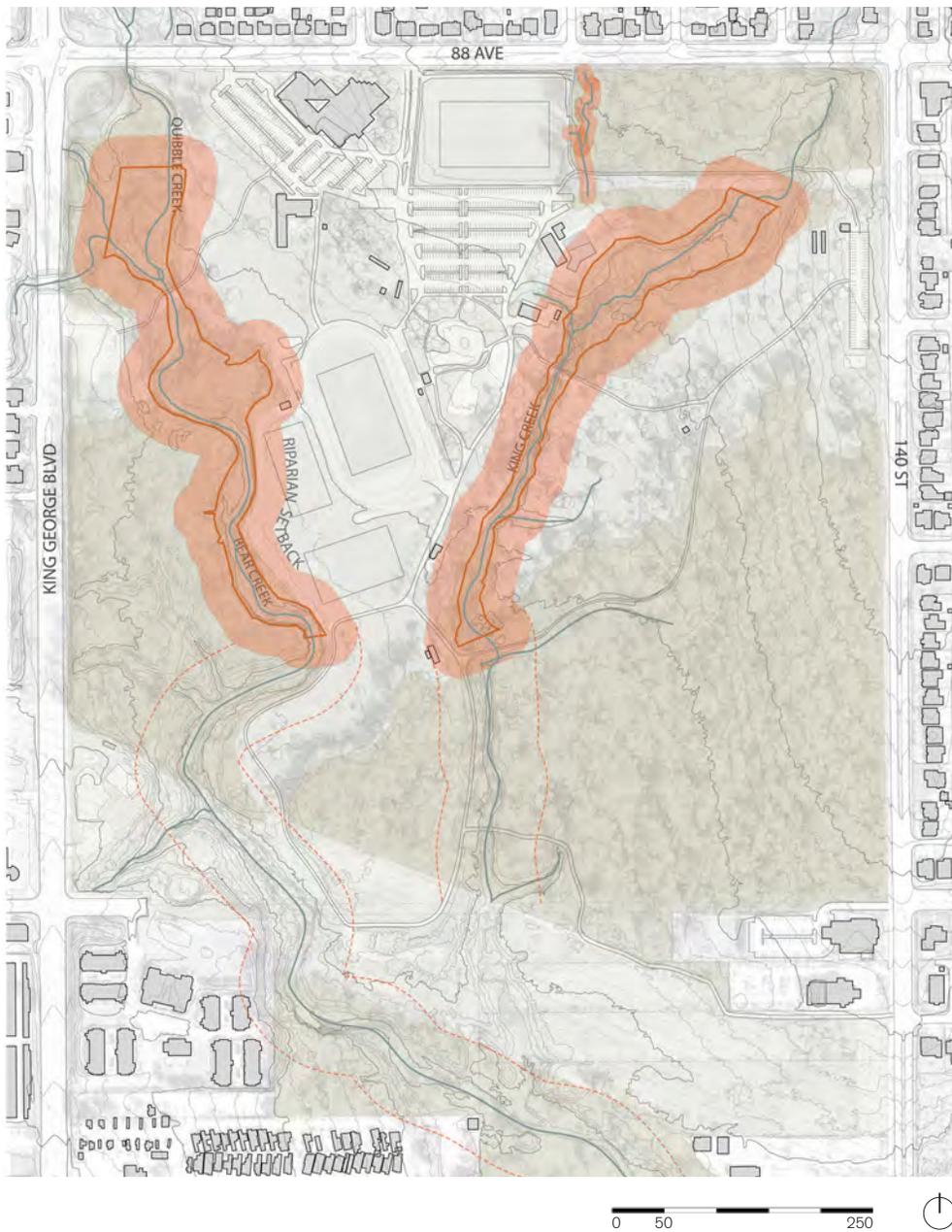


RIPARIAN AREA AND SETBACKS

Due to the proximity of the project to King & Bear Creeks, a sensitive ecosystem development permit will be required.

LEGEND

-  Watercourses
-  Top of Bank
-  Cos Setback

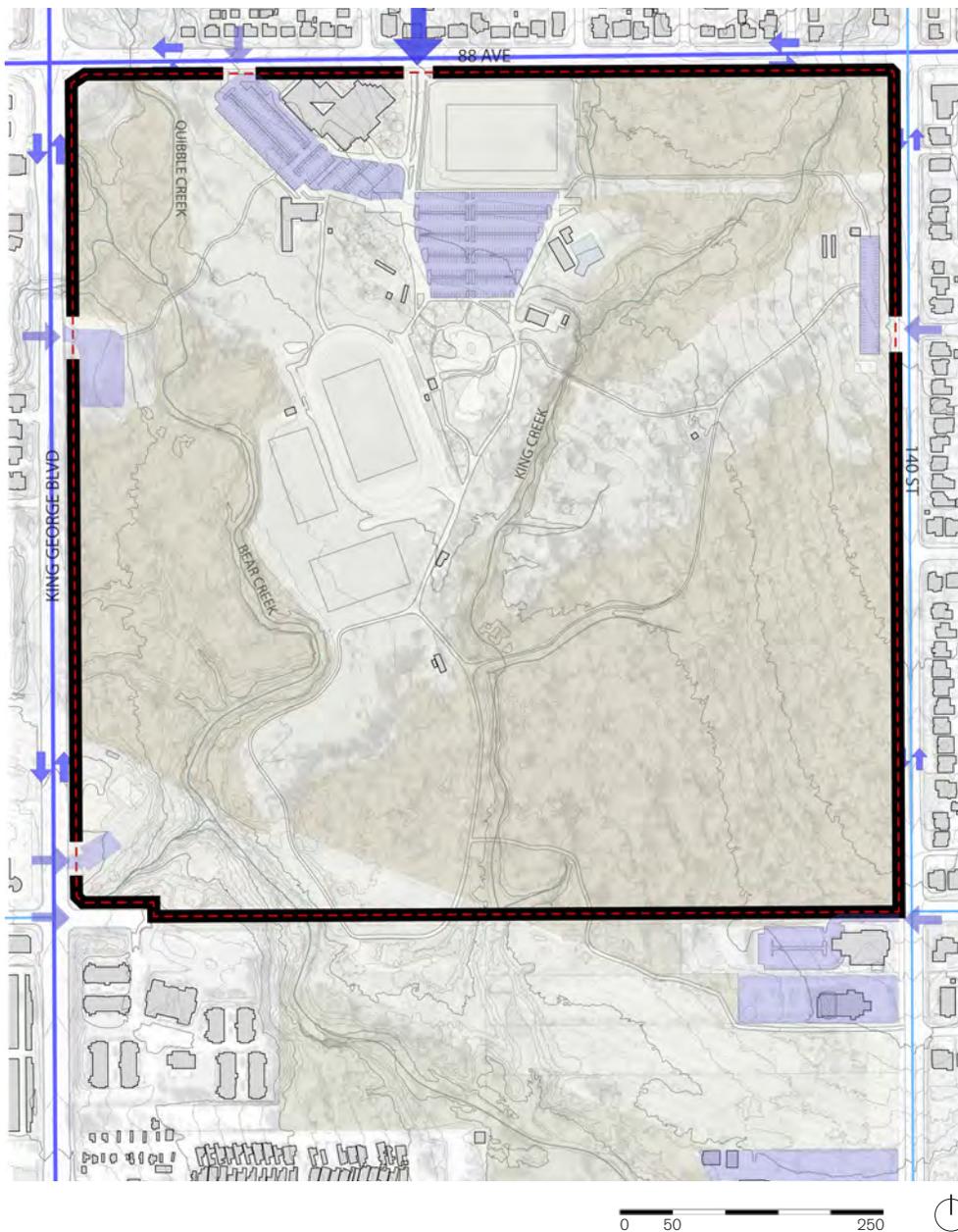


VEHICULAR ROADWAYS & ACCESS AND PARKING

Both 88th Ave and King George Blvd. are principal roadways in the City of Surrey. Bear Creek Park is situated in the crossing of these two main roads. The current main entrance to Bear Creek Park is from 88th Ave, next to the Surrey Arts Centre. There are three secondary entrances to the park from King George Blvd. and 140th St. The site is served through two main parking lots accessed off 88th Ave and 3 small parking lots accessed off King George Blvd. and 140th St.

LEGEND

- | | | | |
|---|--------------------|---|------------------|
|  | Principal Roadways |  | Secondary roads |
|  | Park Boundary |  | Limits |
|  | Main entrance |  | Vehicle entrance |
|  | Parking | | |

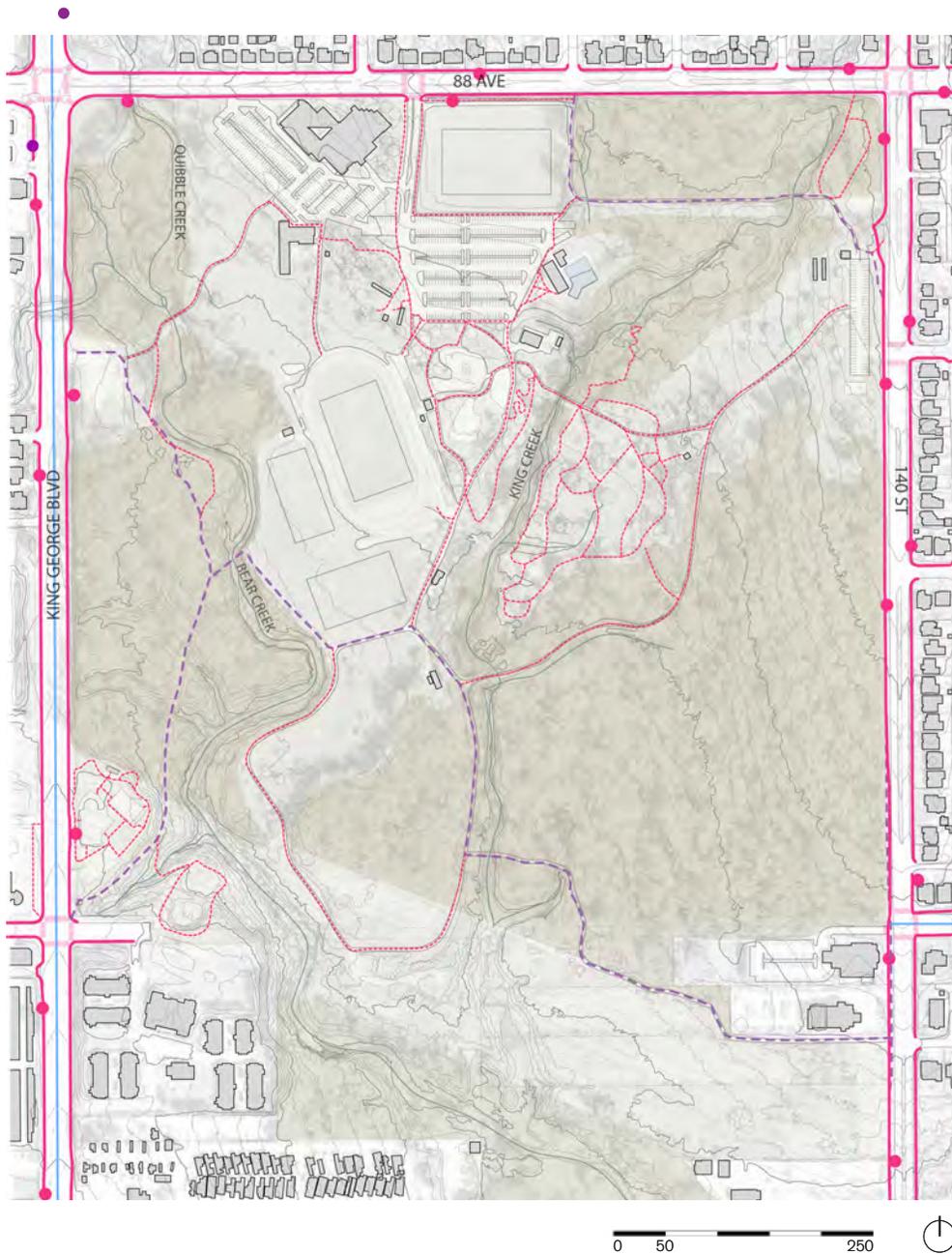


PEDESTRIAN AND CYCLIST ACCESS

The site is accessible to pedestrians along the northern, eastern and western sides of the site, though the main entrance is placed on 88th Ave. Sidewalks border the site along 88th Ave, King George Blvd. and 140th St. and crosswalks are provided at every major intersection and across 88th Ave. Future B-Line bus stops will be located at the corner of 88th Ave and King George Blvd.

LEGEND

- Bus Stop
- Future Rapid Bus Stop
- - - Multi-use Pathway
- Pedestrian Circulation
- Bike lanes
- ⋯ Trails and paths

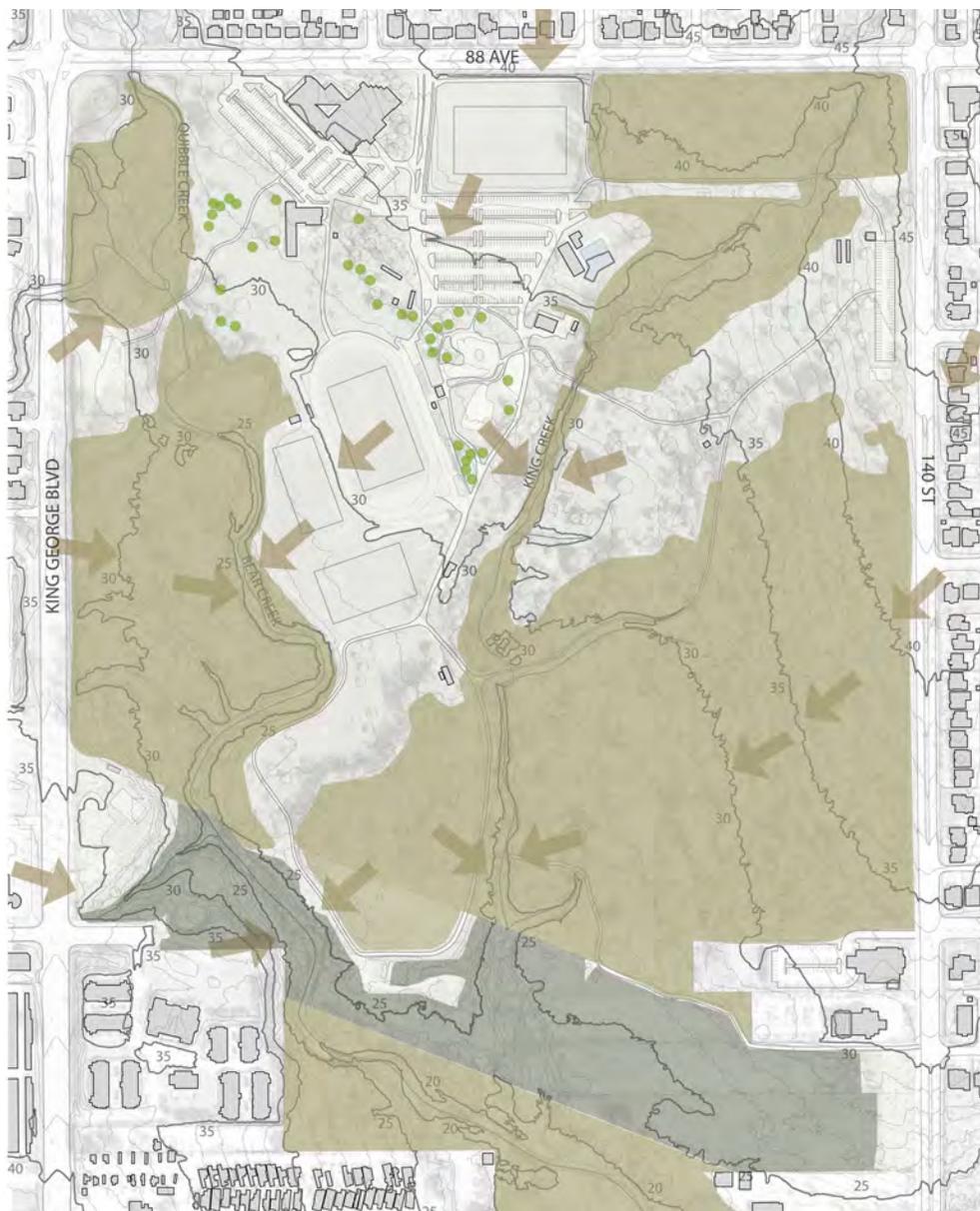


VEGETATION AND FORESTED AREA & TOPOGRAPHY

Bear Creek Park is located between 20 and 45 metres above sea level. The change in grade throughout the park slopes from both the West and East sides of the park towards Bear Creek which runs North South through the park. King Creek also runs through the park and is also another low point that the topography slopes towards. The area of the existing track and field is located at approximately 30 metres above sea level. There is a +/- 3 meter grade change between the field inside the track and the Southern most part of the adjacent parking lot. A stormwater management strategy will need to be considered for the site.

LEGEND

- Creek
- Contours 5 m
- Contours 1 m
- Forest
- Grassland
- Shrubland
- Mature Trees



4.0 Base Case

4.1	Base Case: Proposed Program	36
4.2	Base Case: Site Concept Plan	40
4.3	Base Case: Facility Concept Plan	42
4.4	Base Case: Vehicular Access & Parking	48
4.5	Sustainability Strategy	50
4.6	Civil Concept Design	51
4.7	Base Case: Capital Costing and Funding	54

4.1 Base Case: Proposed Program

PROGRAM

The following pages illustrate an overview summary of the proposed program elements of the new Base Case Destination Sports Facility at Bear Creek Park. The components have been carefully considered and selected against the objectives of meeting:

- Community needs for track and field facilities, as identified by the public engagement survey and through consultation with City Staff and key stakeholders.
- Current and projected capacity requirements for parking.
- Flexibility of programming to meet the needs of general park users, competitive track and field events, and other potential community events.
- Programming that accommodates outdoor training opportunities for track and field athletics.
- Spectator seating and related amenities that can accommodate up to 2,200 spectators.

A detailed program summary has been prepared for this project and is available to use to further develop the project.

PROGRAM HOSTING CAPABILITIES

The upgrades to the Bear Creek Park Track and Stadium will include a reconfiguration of track and field facilities to mitigate logistical challenges. While the running track will remain in the current location, the non-track events such as shot put, hammer throw/discuss, pole vault and long jump will be relocated to the south end of the track where an expanded rubberized surface will encompass these facilities. The consolidation of these events will allow for easier setup and take down with the close proximity to indoor storage below the grand stands. Layout of all track and field facilities are designed to meet IAAF standards and the proposed event layout meets the IAAF's Construction V standards published in the World Athletics' Track And Field Facilities Manual 2019 Edition. The Construction V Standard will support local, regional, and national level events. With only one facility per event, there is a limit on the number of athletes competing at any given time.

Events such as the children's festival, concerts or other community events could be supported by the layout of the new updated facility. The all-weather field along with the existing lights will also allow for soccer and football teams to schedule practices and games during evening hours.

BASE CASE PROPOSED PROGRAM SUMMARY TABLE

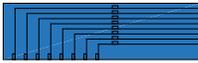
1. BASE BUILDING PROGRAM

1.1 Seating

1.1.1 Covered fixed seating

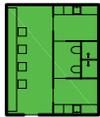


1.1.2 Uncovered bench seating



1.2 Team & Training facilities

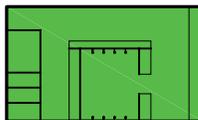
1.2.2 Officials WC, Shower and Change (x1)



1.2.3 Universal Single user Washroom (x2)



1.2.4 Team Washrooms & Changerooms (x2)



1.2.5 Storage

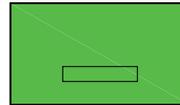
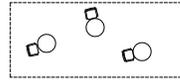


1.2.6 Mechanical



1.3 Public Facilities

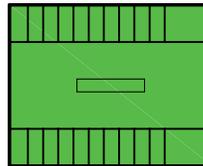
1.3.2 Concession



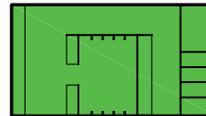
1.3.3 Ticketing



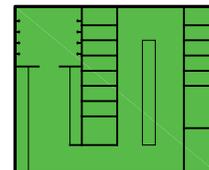
1.3.5 Universal Washrooms & Changerooms



1.3.6 Male Washrooms & Changerooms



1.3.7 Female Washrooms & Changerooms



1.3.8 Timing



1.3.9 Announcing Booth

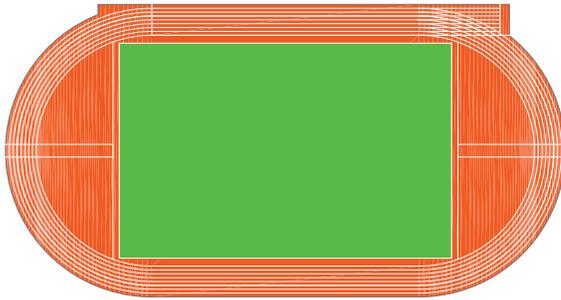


2 BASE LANDSCAPE PROGRAM

2.1 Training Upgrades

2.1.1 Rubber running track

2.1.2 Artificial turf field

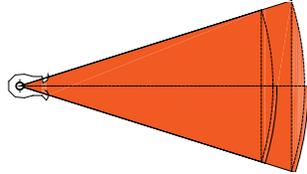


2.2 Non-track related events

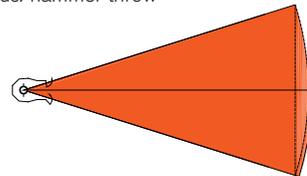
2.2.1 Long jump/triple jump



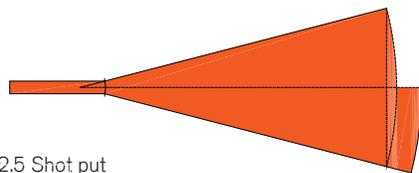
2.2.2 Hammer throw



2.2.3 Discus/hammer throw



2.2.4 Javelin throw

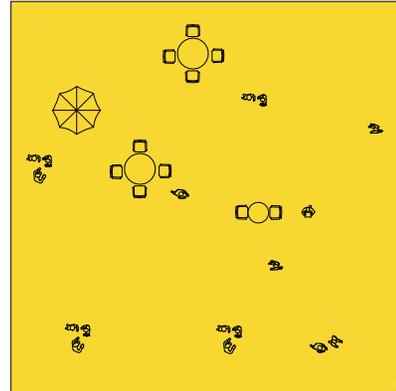


2.2.5 Shot put

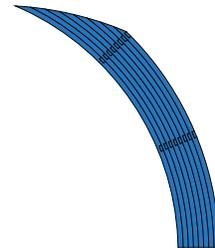


2.3 Site Upgrades

2.3.1 Plaza



2.3.3 Uncovered informal seating



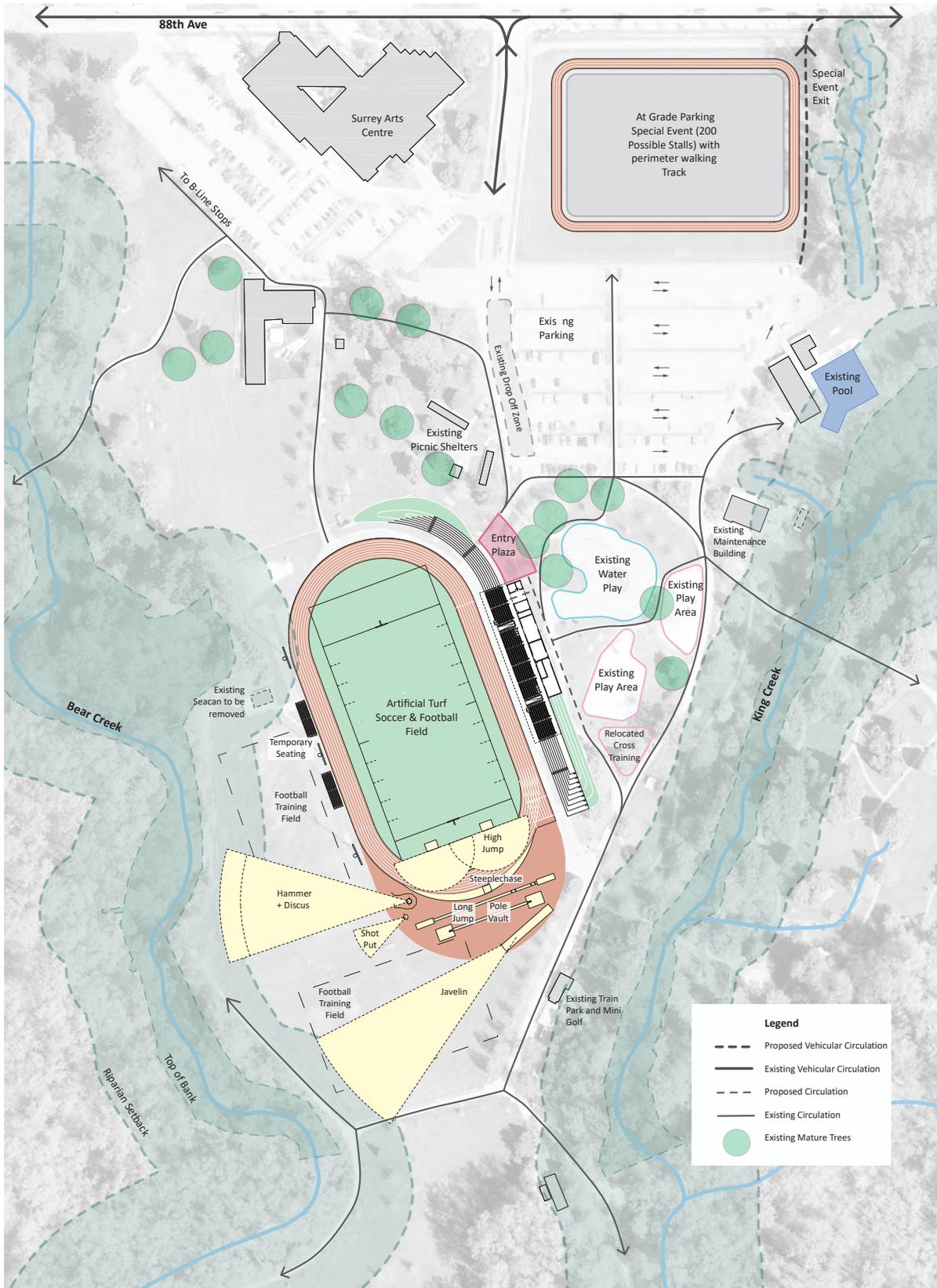
4.2 Base Case: Site Concept Plan

The thematic approach to the Base Case landscape concept responds to the track and field upgrades and new facility. The landscape concept plan improves circulation, addresses parking concerns and establishes a defined entry into the proposed facility. Opportunities for low impact development (LID) and improved connections to Bus Rapid Transit were also identified through the preliminary design process, and are noted on the concept plan.

Directly adjacent to the existing bleachers the existing spray park area and children's play areas are maintained.

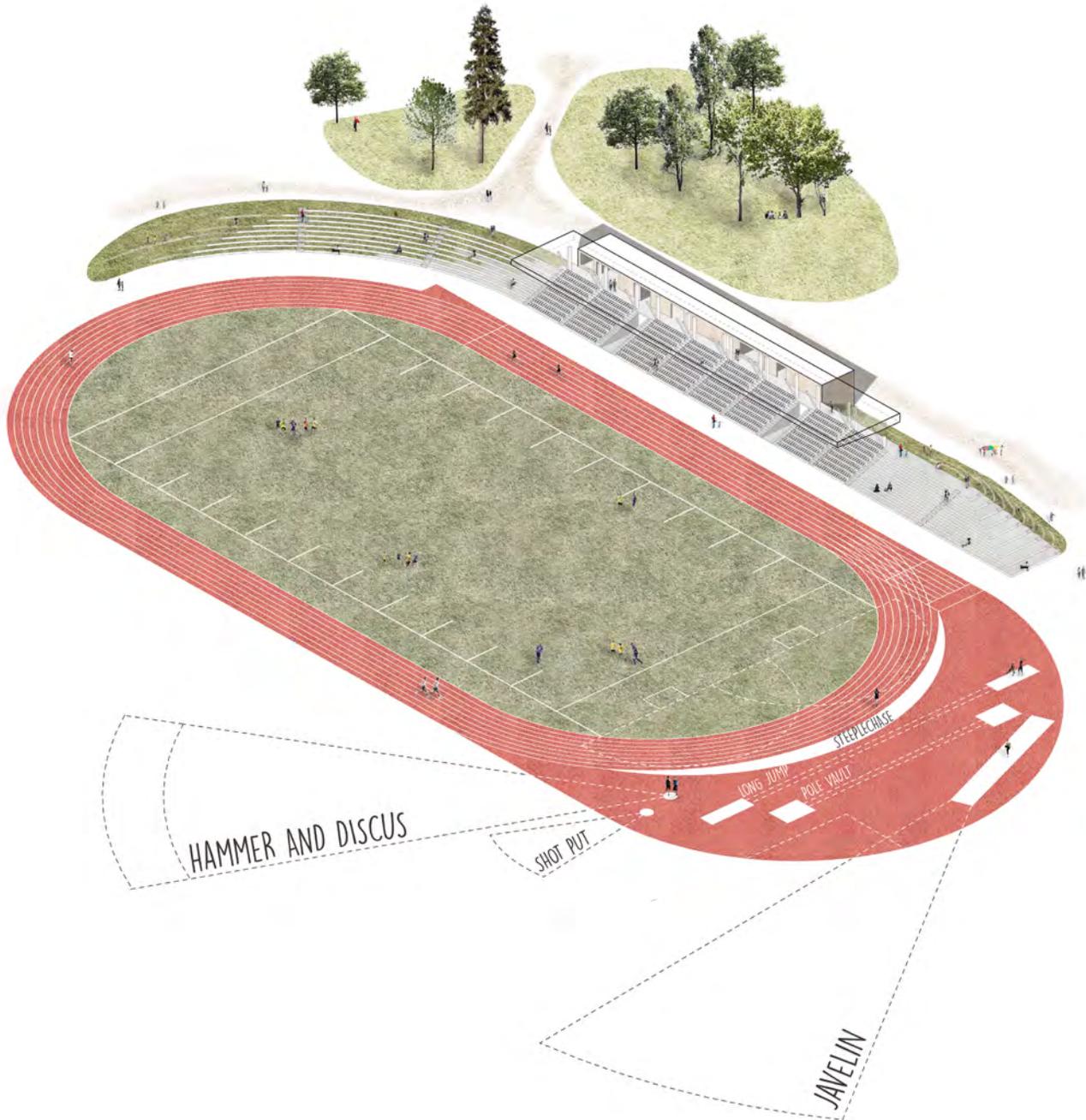
Establishing a defined entry and supporting plaza space for the new facility was identified as a key programming component. The design integrates a modest entry plaza that extends from the northeast corner of the track and along the east side of the grandstands, allowing for a hierarchy of entry points into the facility.

With increased seating capacity at the new facility the parking study identified the need for additional parking infrastructure. The study concluded that events will occasionally require additional parking, while daily programming can be supported by the existing parking infrastructure. The concept addresses the temporary parking need by locating event parking to the existing soccer field. Soccer would be redirected to the artificial turf playfield at the upgraded track. The surface material of the event parking area can be designed to allow for a flexibility in uses. Redevelopment of this area of the park also led to identifying environmental enhancements. The park operations building is maintained in the Base Case scheme.

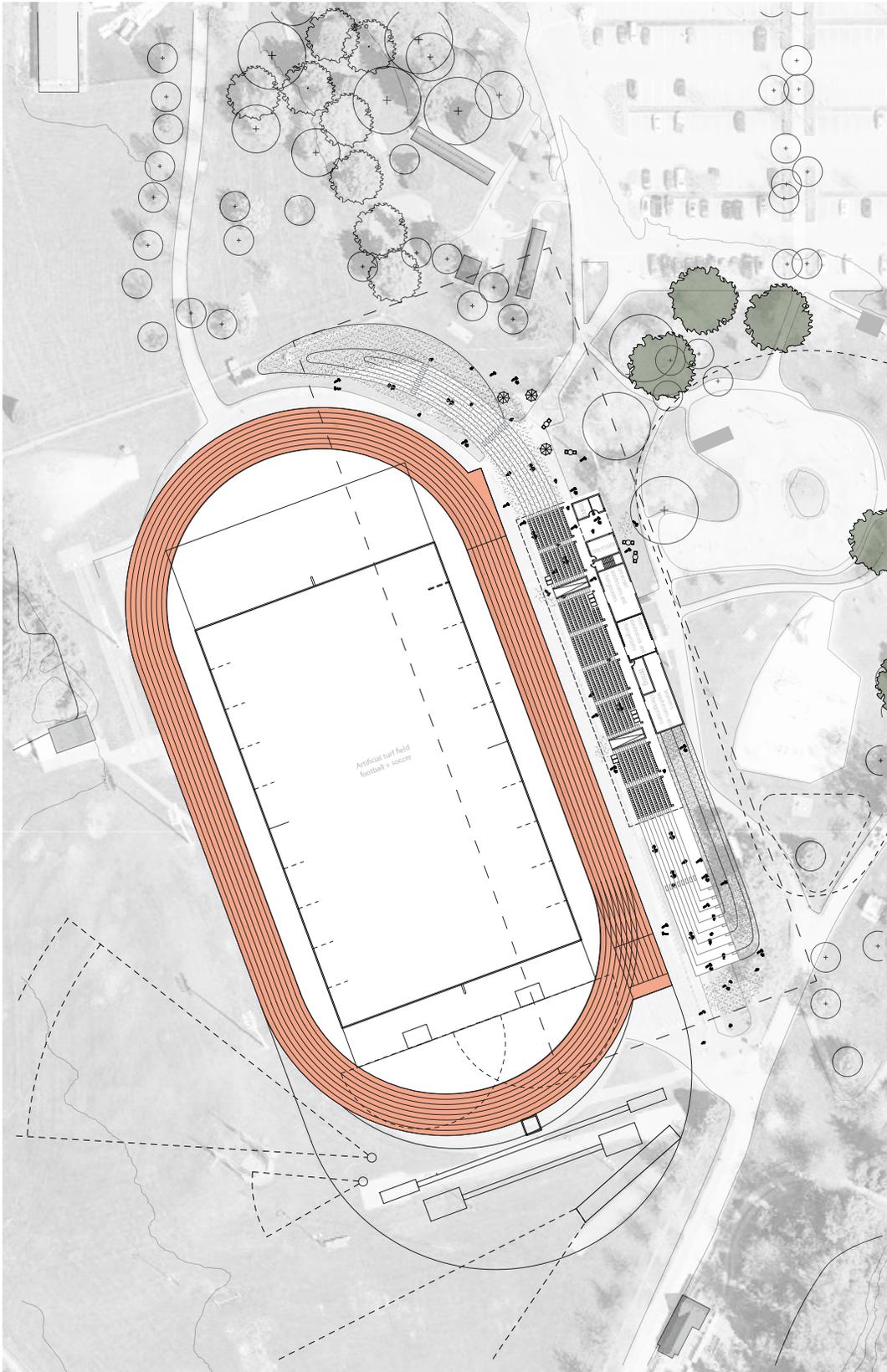


▲ Base Case: Overall site concept plan

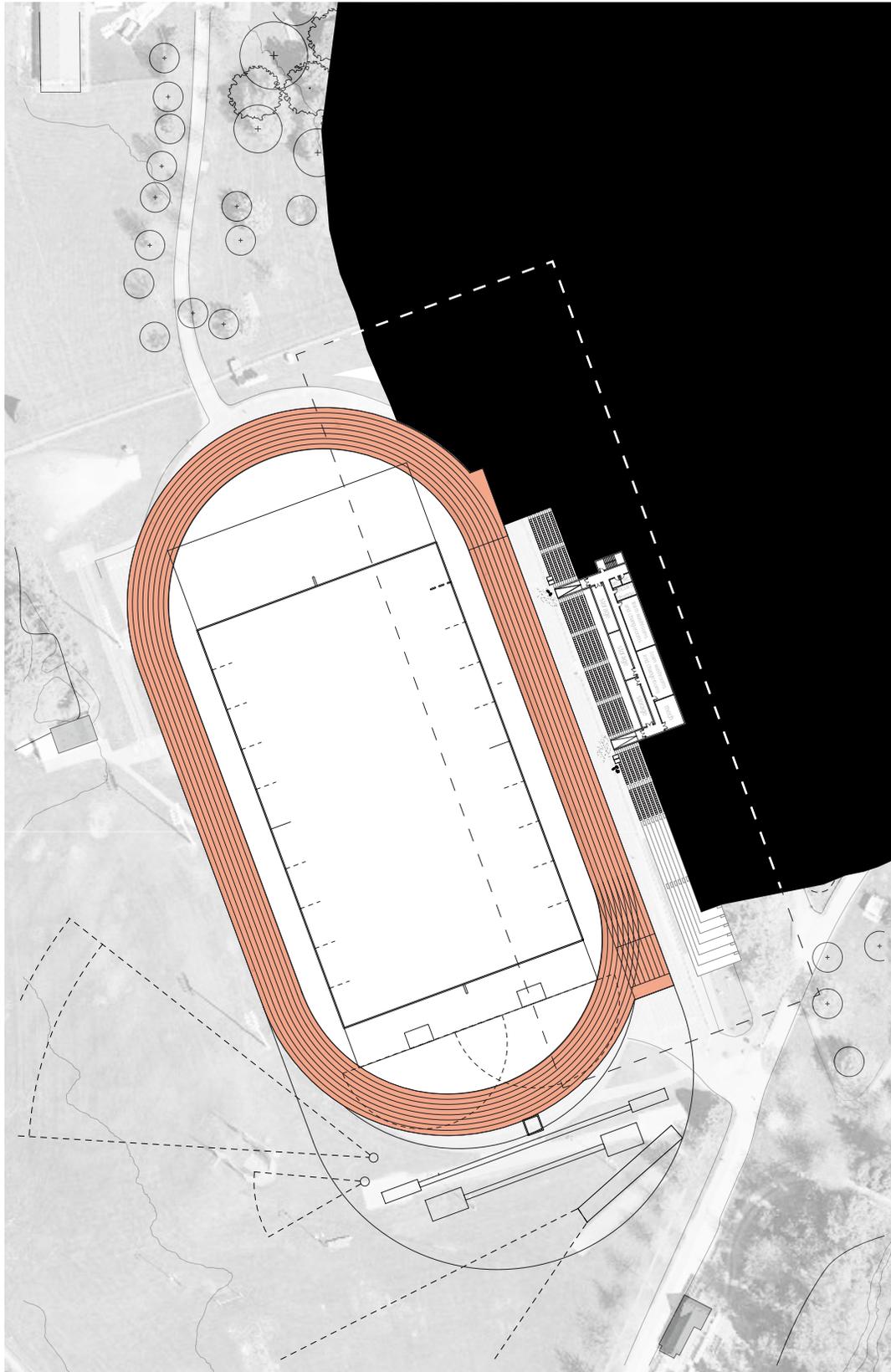
4.3 Base Case: Facility Concept Plan



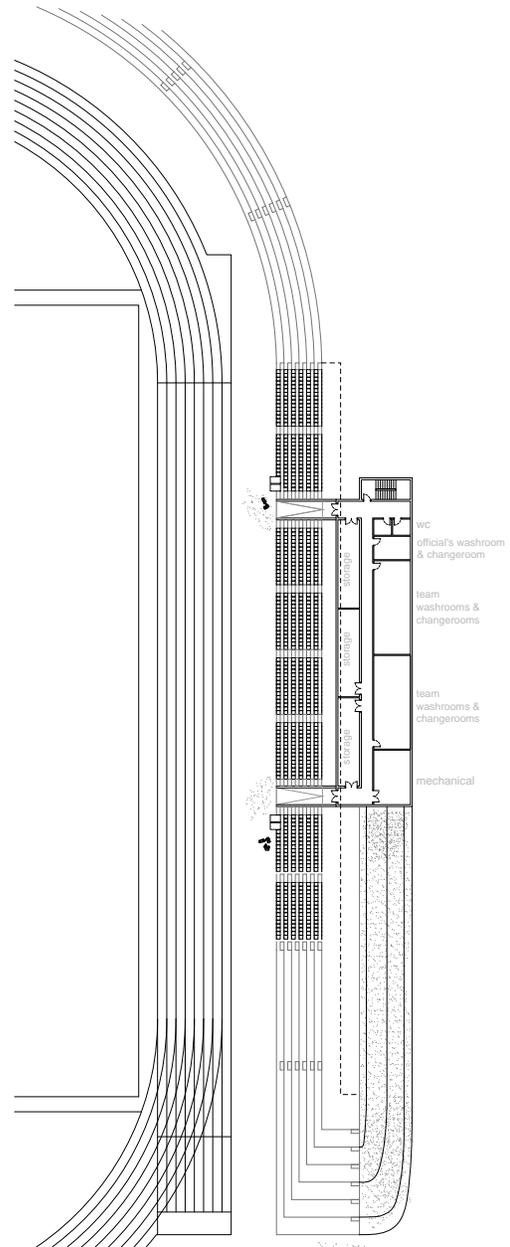
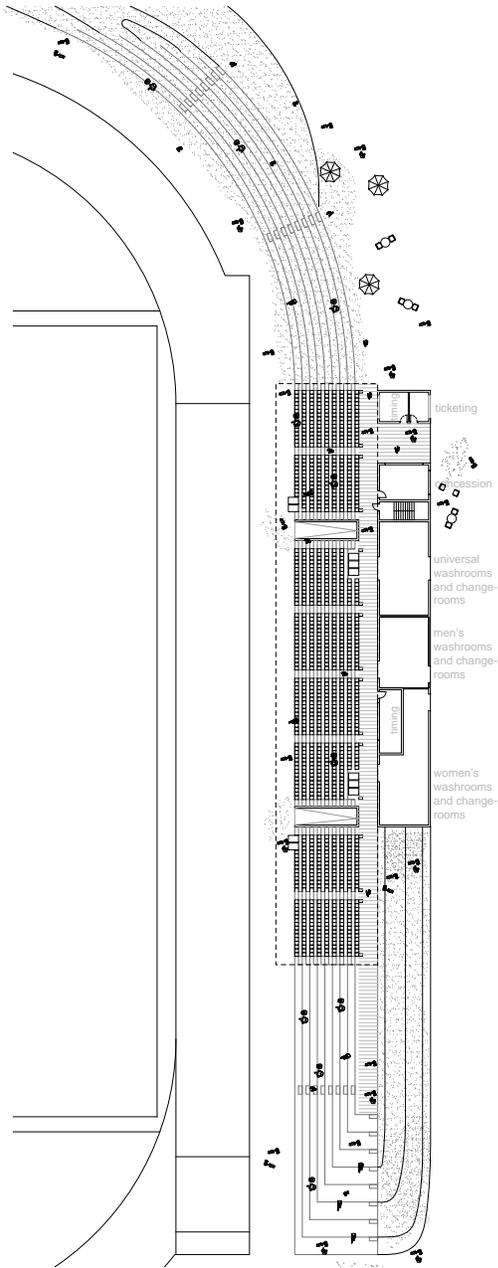
The proposed Base Case facility concept design for both the overall park improvements and the Sports Facility were informed by input from analysis of best practice precedents, an analysis of regional track and field facilities, and key stakeholder groups. The concept was informed by a desire to minimize the visual impact of the new facility on the park by nesting the building and grandstand into the landscape through careful attention to the site grading. The facilities public and athletic program elements form a linear bar that runs North South along the length of the track. The concession, washrooms, and changerooms are oriented such that they can be accessed by both general users of the park and by spectators during sporting events. The team changerooms and related program elements are located on a lower level providing direct access to the track and sports field.



▲ Base Case: Overall site plan

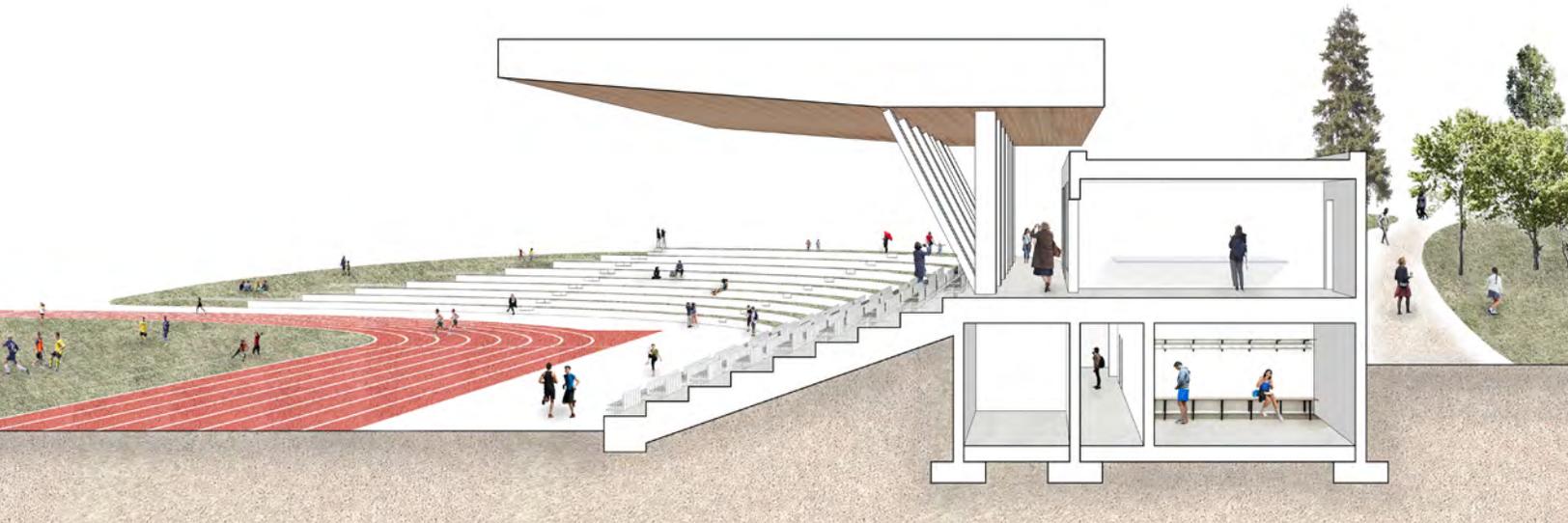


▲ Base Case: Overall site plan at the facility lower level

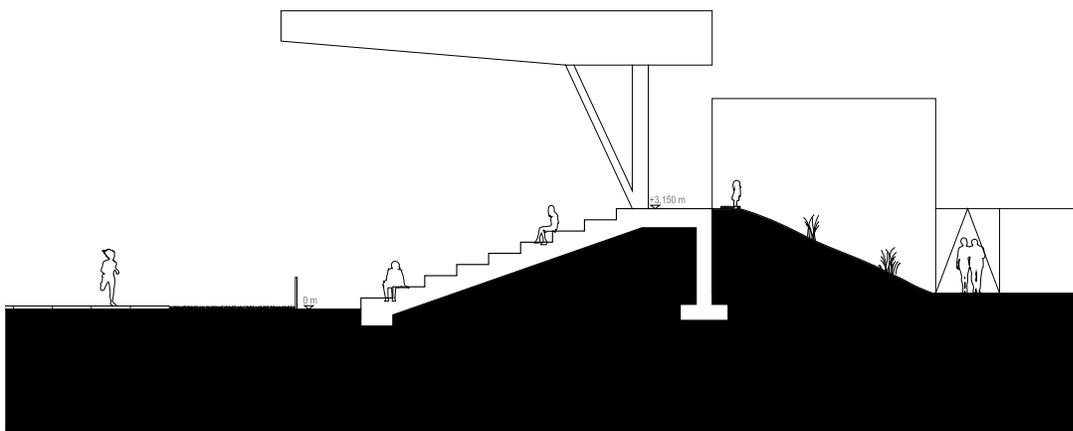
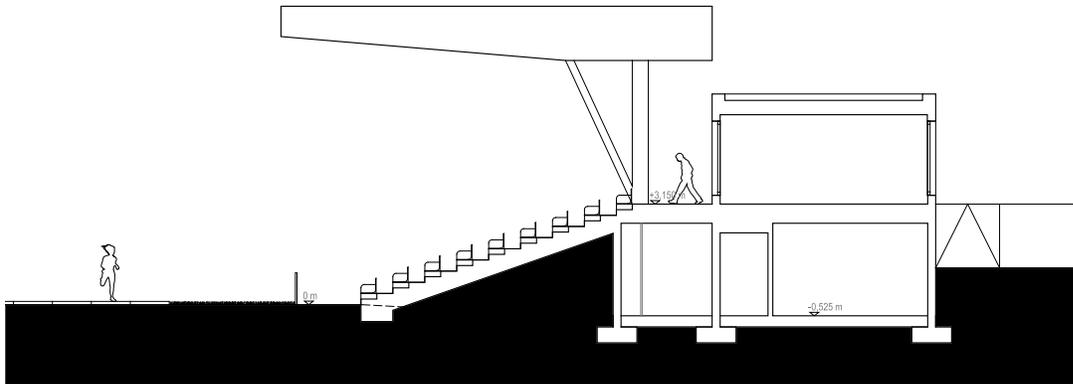
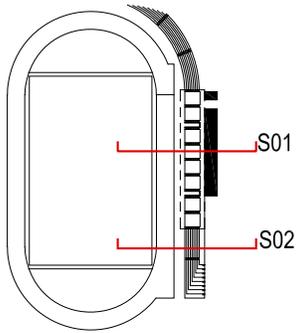


▲ Base Case: Ground floor

▲ Base Case: Lower level plan



▲ Base Case: Sectional perspective of grandstand field facilities



▲ Base Case: Sections of grandstand field facilities

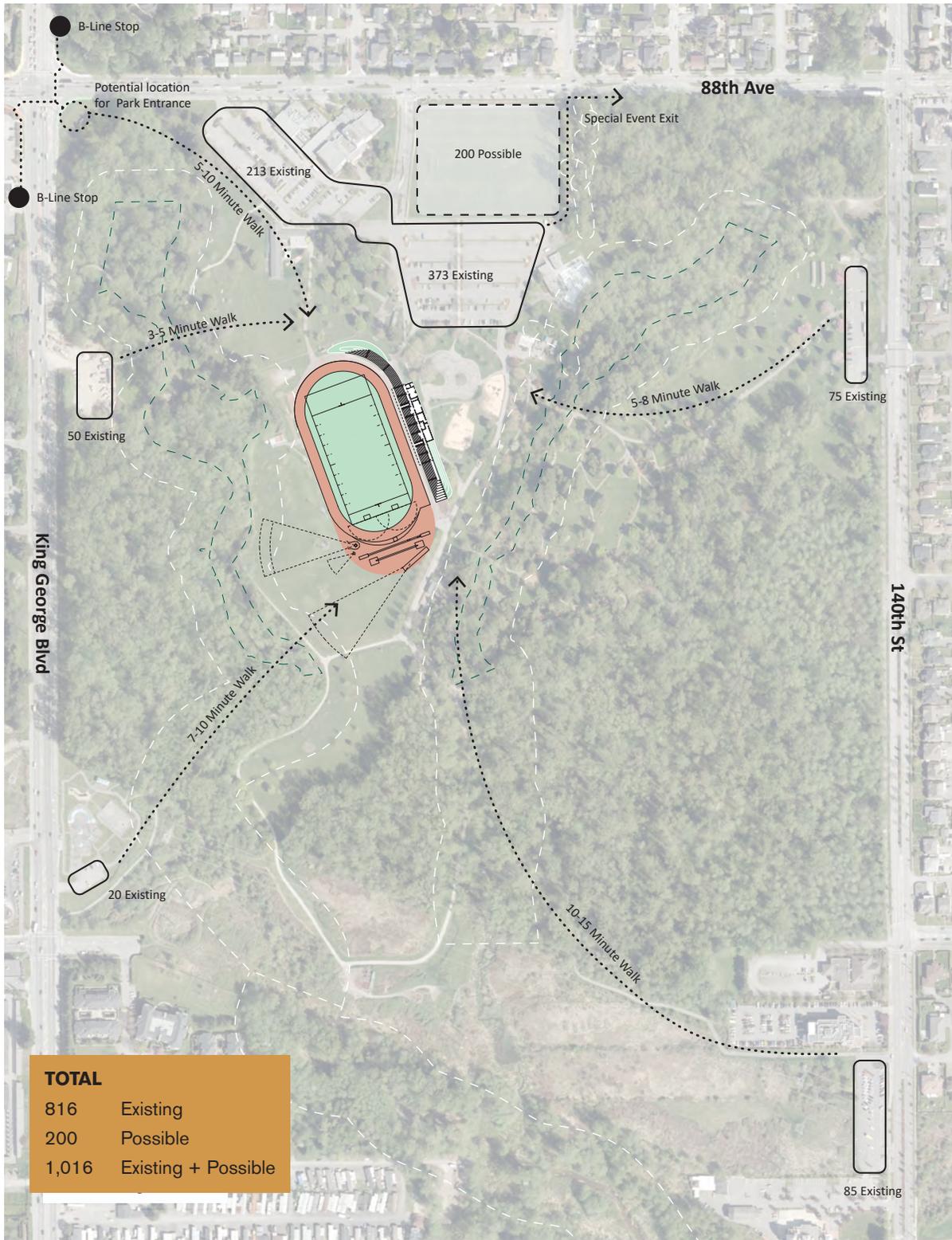
4.4 Base Case: Vehicular Access & Parking

The increased seating capacity of the new grandstand and the goal of attracting larger events will impact the existing parking infrastructure. The approach to evaluating the parking capacity and needs was done via the Bunt & Associates parking study. The study identified the need for increased parking capacity to support larger events along with typical daily park users. As identified on page 49. The Base Case Sports Facility total proposed new stall count is 1,016 increased from the 816 existing.

The overall vehicular access and parking plan identifies all of the parking lots servicing Bear Creek Park and their proximity to the facility. The approximate walking time (in minutes) has been noted for the existing and proposed pedestrian routes.

The traffic study highlighted the need to provide an additional exit from the main parking lot to alleviate congestion during major events. The new exit is proposed along the east side of the proposed event parking and would be a right turn only onto 88th Avenue.

A high level evaluation of each lot was done to determine if they could be expanded to provide additional capacity. This identified one new area that could be converted to parking, and two other lots that could expand to provide additional capacity. The Base Case scheme integrates the 200 possible stalls adjacent to the existing parking lot, but does not include additional parking on 140th Street or on King George Boulevard.



▲ Base Case: Existing and possible parking

4.5 Sustainability Strategy

Environmental initiatives in the project

+ Improved stormwater management through a green roof, rain gardens, swales, Low Impact Development (LID) parking



▲ Low Impact Development parking

+ Keeping track, lighting and facility in current footprint, minimizing disturbance on other areas of the park



▲ Green roof (Base Case Enhanced)

+ Restoration of stream corridor by converting grass areas back to stream habitat



▲ Stormwater management

+ Improve biodiversity of site with native and pollinator plants



▲ Rain garden

+ Explore low carbon building solutions including advanced building designs, new construction methods, and efficient components



+ Improve efficiency of waterpark including grey water reuse



▲ Pollinator plants

4.6 Civil Concept Design

BACKGROUND

The report has been based on the following assumptions:

1. Existing underground utility alignments and sizes shown on the preliminary servicing plans have been approximated based on the very limited information available to date, especially as it relates to the existing water distribution network.
2. The preliminary servicing plan has been prepared without current detailed survey or utility locates. The exact size, and alignment of existing underground utilities is undetermined at this point.
3. Detailed survey and utility locates should be completed to determine the alignment and size of existing underground utilities prior to detailed design commencement.
4. This feasibility report was prepared without detailed design, current topographic survey, environmental, geotechnical, or arborist reports.
5. We have not received any formal written engineering comments or requirements from the City of Surrey for this site; therefore, this report should be considered as a preliminary review only.
6. It is assumed that no downstream storm, sanitary, or watermain upgrades would be triggered with the development of this site. This feasibility report does not include detailed storm, sanitary, or water main calculations.

STORM SEWER

There are multiple existing onsite storm sewer systems on the site. The drainage systems service the existing parking lots, buildings, pool, water play area, playgrounds, and sports fields. These systems discharge into Bear Creek (Class A) and King Creek (Class A) via three existing creek outfalls and overland flow.

A portion of the existing storm drainage system which services the existing playgrounds and water play area will need to be re-routed due to the location and geometry of the proposed structures on the site. A new building service connection is proposed near the southeast corner of the proposed building. It is assumed that no modifications will be required for the existing field and track drainage system. The existing and proposed storm drainage system can be seen in Appendix A – Preliminary Servicing Plan.

SANITARY SEWER

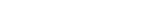
There is an existing municipal sanitary sewer main which runs through the west side of the site in a municipal right-of-way. The municipal sanitary sewer main enters the site via 88th Avenue, runs south, and exits via 84th Avenue. An existing local onsite sanitary sewer system discharges into the existing municipal sanitary sewer. A portion of the existing onsite sanitary sewer system will need to be re-routed due to the location and geometry of the proposed structures on the site. A new building service connection is proposed near the south east corner of the proposed building. The existing and proposed sanitary sewer system can be seen in Appendix A – Preliminary Servicing Plan.

WATER MAIN

There is an existing onsite water distribution network on the site which consists of water mains, valves, fittings, and fire hydrants. The onsite water distribution network services the existing Surrey Arts Center, Bear Creek Pool, water play area, washrooms, pavilion building, train station, and field irrigation systems. Existing records indicate that the onsite water distribution network is likely supplied by three existing water service connections off 88th Avenue. The sizes indicated on records appear to be too small for the size and uses of the area being serviced. Further investigation by the City Water Operations Dept. is recommended to confirm size and number of current service connections into this portion of the park. There was also a water valve surveyed along 88 Avenue east of the proposed special event parking where no service connection is indicated in current records. Further investigation into this location by the City is also recommended as this may alter the assumptions about how the pool is currently being serviced.

A portion of the existing onsite water distribution network will likely need to be re-routed due to the location and geometry of the proposed structures on the site. A new building service connection is proposed near the south side of the proposed building. One proposed fire hydrant will also need to be installed close to the proposed structures to satisfy the City's fire safety design criteria. The exact location of the onsite water mains is unknown at this point due to the very limited information available at this time. The approximate existing and proposed water distribution network can be seen in the following page.

It is recommended that a detailed site investigation to more accurately determine the layout and sizing of existing infrastructure within the park is carried out prior to detailed civil servicing designs being commenced.

LEGEND	
APPROXIMATE EXISTING STORM SEWER	
APPROXIMATE EXISTING SANITARY SEWER	
APPROXIMATE EXISTING WATER MAIN	
APPROXIMATE EXISTING STORM SEWER TO BE REMOVED	
APPROXIMATE EXISTING SANITARY SEWER TO BE REMOVED	
APPROXIMATE EXISTING WATER MAIN TO BE REMOVED	
PROPOSED STORM SEWER	
PROPOSED SANITARY SEWER	
PROPOSED WATER MAIN	

- NOTES:**
1. EXISTING UNDERGROUND UTILITY ALIGNMENTS AND SIZES SHOWN ON THE PRELIMINARY SERVICING PLANS HAVE BEEN APPROXIMATED BASED ON THE VERY LIMITED INFORMATION AVAILABLE TO DATE, ESPECIALLY AS IT RELATES TO THE EXISTING WATER DISTRIBUTION NETWORK.
 2. THE PRELIMINARY SERVICING PLAN HAS BEEN PREPARED WITHOUT DETAILED SURVEY OR UTILITY LOCATES. THE EXACT SIZE, AND ALIGNMENT OF EXISTING UNDERGROUND UTILITIES IS UNDETERMINED AT THIS POINT.
 3. THE PRELIMINARY SERVICING PLAN HAS BEEN CREATED BASED ON THE BACKGROUND / AS-BUILT INFORMATION RECEIVED BY APJUN MARTIN ON JUNE 5, 2019.
 4. DETAILED SURVEY AND UTILITY LOCATES SHOULD BE COMPLETED TO DETERMINE THE ALIGNMENT AND SIZE OF EXISTING UNDERGROUND UTILITIES PRIOR TO DETAILED DESIGN COMMENCEMENT.

4.7 Base Case: Capital Cost and Funding

CAPITAL COST

It is anticipated, based on the preliminary Class D costing prepared by Ross Templeton + Associates, that the construction cost of the Base Case scheme will be approximately \$14.4 million, and that the total project cost, including soft costs and contingencies, will be approximately \$ 21 million. A detailed Class D costing is provided in the separate Costing Report.

FUNDING

The City's Five-Year Capital Plan (2019 – 2023) identified funding for a new Bear Creek Park Destination Sports Facility. The Capital Plan Commits:

2019	\$700,000
2022	\$2,800,000
2023	\$3,500,000
Total City Funding:	\$7,000,000
Anticipated Grant Funding:	\$14,000,000
Total Project Budget:	\$21,000,000

There is an assumption that the project will successfully receive \$14,000,000 in Federal and Provincial grants to support the overall project budget of approximately \$21,000,000.

5.0 Base Case Enhanced

5.1	Base Case Enhanced: Proposed Program	36
5.2	Base Case Enhanced: Site Concept Plan	40
5.3	Base Case Enhanced: Facility Concept Plan	42
5.4	Base Case Enhanced: Vehicular Access & Parking	48
5.5	Base Case Enhanced: Capital Cost and Funding	50

5.1 Base Case Enhanced: Proposed Program

PROGRAM

The following pages illustrate an overview summary of the proposed program elements of the new Base Case Enhanced Destination Sports Facility at Bear Creek Park. The components have been carefully considered and selected against the objectives of meeting:

- Community needs for track and field facilities, as identified by the public engagement survey and through consultation with City Staff and key stakeholders.
- Current and projected capacity requirements for parking.
- Flexibility of programming to meet the needs of general park users, competitive track and field events, and other potential community events.
- Programming that accommodates year round training opportunities for track and field athletics. This is unique to the Base Case Enhanced scheme.
- Spectator seating and related amenities that can accommodate up to 2,200 spectators.
- Programming other social and recreational needs with amenities like a multi-purpose room, concession, youth play activities, spray features, cafe space, community gathering spaces, and childcare. This is unique to the Base Case Enhanced scheme.

A detailed program summary has been prepared for this project and is available to use to further develop the project.

PROGRAM HOSTING CAPABILITIES

The upgrades to the Bear Creek Park Track and Stadium will include a reconfiguration of track and field facilities to mitigate logistical challenges. While the running track will remain in the current location, the non-track events such as shot put, hammer throw/discus, pole vault and long jump will be relocated to the south end of the track where an expanded rubberized surface will encompass these facilities. The consolidation of these events will allow for easier setup and takedown with the close proximity to indoor storage below the grand stands. Layout of all track and field facilities are designed to meet IAAF standards and the proposed event layout meets the IAAF's Construction V standards published in the World Athletics' Track And Field Facilities Manual 2019 Edition. The Construction V Standard will support local, regional, and national level events. With only one facility per event, there is a limit on the number of athletes competing at any given time.

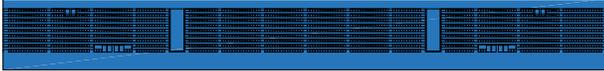
A proposed all-weather artificial turf infield will allow for the ability to host non-track and field related events with minimal impact to the infield surface. Events such as the children's festival, concerts or other community events could be supported by the layout of the new updated facility. The all-weather field along with the existing lights will also allow for soccer and football teams to schedule practices and games during evening hours.

BASE CASE ENHANCED PROPOSED PROGRAM SUMMARY TABLE

1. BASE BUILDING PROGRAM

1.1 Seating

1.1.1 Covered fixed seating

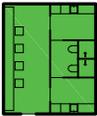


1.2 Team & Training facilities

1.2.1 Team Offices (x6)



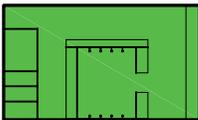
1.2.2 Officials WC, Shower and Change (x1)



1.2.3 Universal Single user Washroom (x4)



1.2.4 Team Washrooms & Changerooms (x4)



1.2.5 Storage

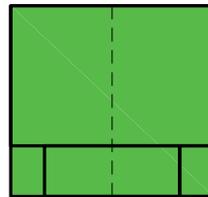


1.2.6 City of Surrey Maintenance facilities

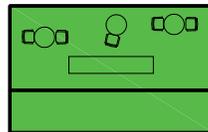
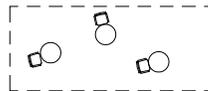


1.3 Public Facilities

1.3.1 Meeting room



1.3.2 Concession



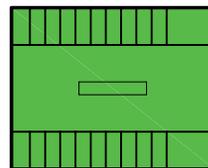
1.3.3 Ticketing



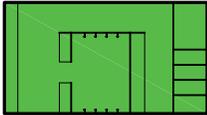
1.3.4 Offices (x3)



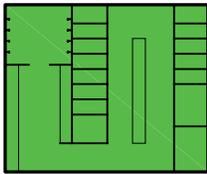
1.3.5 Universal Washrooms & Changerooms



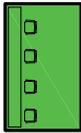
1.3.6 Male Washrooms & Changerooms



1.3.7 Female Washrooms & Changerooms



1.3.8 Timing



1.3.9 Announcing Booth

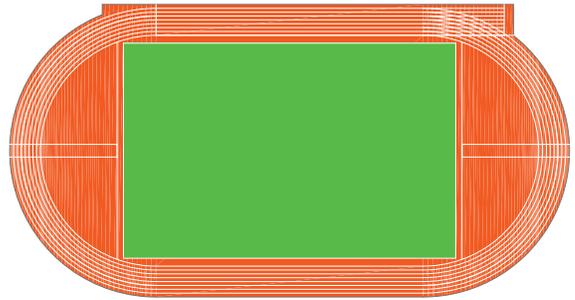


2 BASE LANDSCAPE PROGRAM

2.1 Training Upgrades

2.1.1 Rubber running track

2.1.2 Artificial turf field

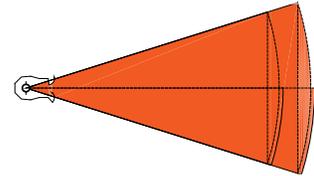


2.2 Non-track related events

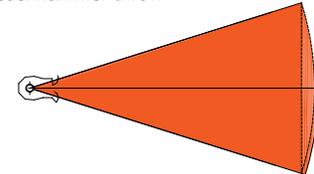
2.2.1 Long jump/triple jump



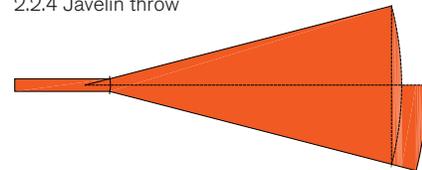
2.2.2 Hammer throw



2.2.3 Discus/hammer throw



2.2.4 Javelin throw

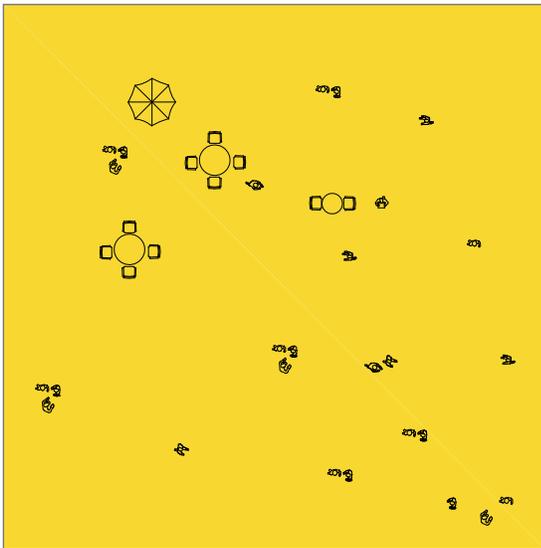


2.2.5 Shot put

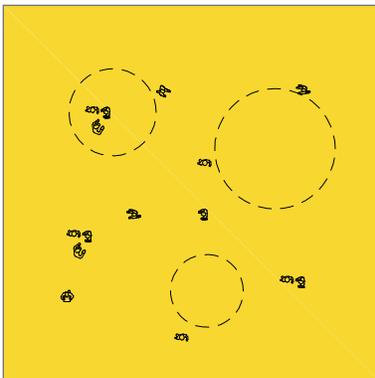


2.3 Site Upgrades

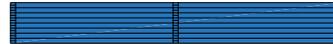
2.3.1 Plaza



2.3.2 Water feature



2.3.3 Uncovered informal seating



2.3.4 Picnic Areas

2.3.5 Playgrounds

Nature Based Playground

Track Themed Playground

Water Park

2 lane 300m walking track

3 ADDITIONAL BUILDING PROGRAM

3.1 Indoor training

3.1.1 80 meter Indoor Track & Field



3.1.2 Indoor Fitness



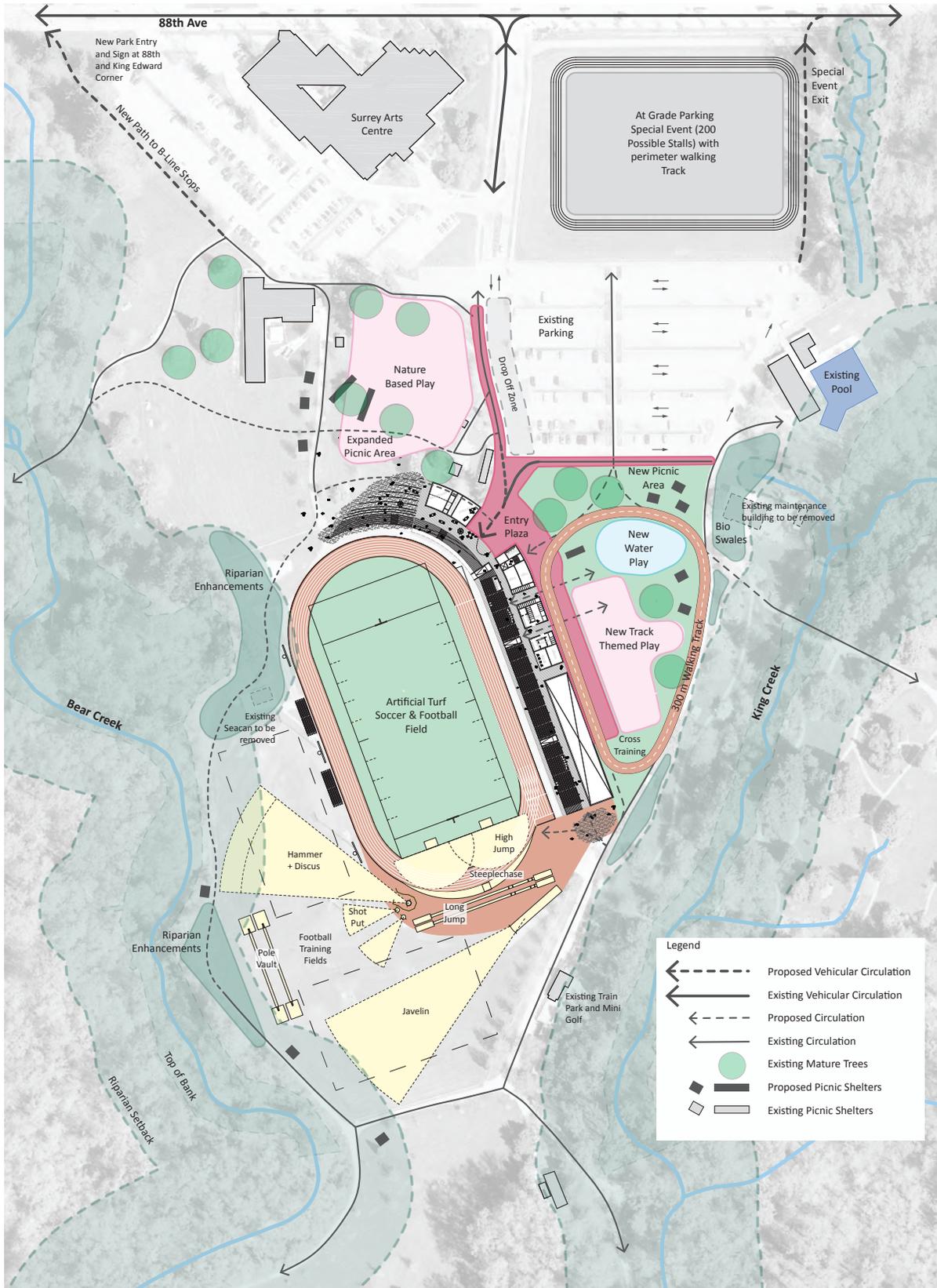
5.2 Base Case Enhanced: Site Concept Plan

The thematic approach to the Base Case Enhanced landscape concept responds to the track and field upgrades and new facility. An increased grandstand footprint encroaches on existing park amenities, necessitating the redevelopment of the impacted adjacent play areas. The landscape concept plan capitalizes on the upgrades to these aging play areas, improving circulation, addressing parking concerns and establishing a defined entry into the proposed facility. Opportunities for riparian enhancement, low impact development (LID) and improved connections to Bus Rapid Transit were also identified through the preliminary design process, and are noted on the concept plan.

Directly adjacent to the existing bleachers is an aging spray park area and children's play areas. With impacts from the grandstand replacement, upgrades to these areas are addressed. Efficiencies in current spray park design, allow for the new spray park area to be reduced by 25%. Consolidating the children's play equipment into one large thematic play area was also included. These two play areas are bound by a proposed walking track. The theme for these areas is inspired by the new track and field upgrades with images supported by our precedent study.

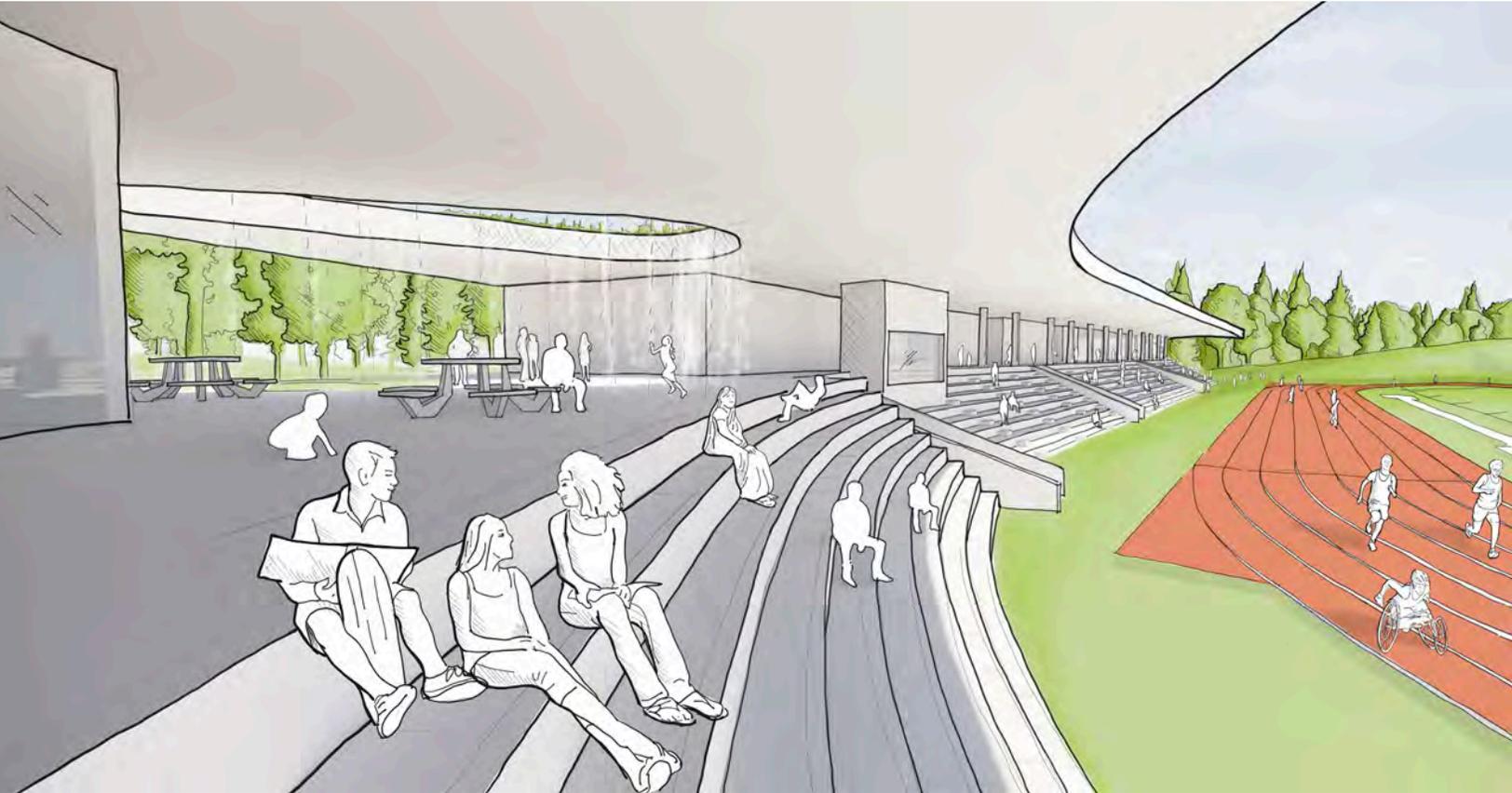
Establishing a defined entry and supporting plaza space for the new facility was identified as a key programming component. The Base Case Enhanced design for the new entry plaza supports larger events by adding space for community groups and vendors to set up adjacent to the facility. The entry plaza extends from the northeast corner of the track and along the east side of the grandstands, allowing for a hierarchy of entry points into the facility.

With increased seating capacity at the new facility the parking study identified the need for additional parking infrastructure. The study concluded that events will occasionally require additional parking, while daily programming can be supported by the existing parking infrastructure. The concept addresses the temporary parking need by locating event parking to the existing soccer field. Soccer would be redirected to the artificial turf playfield at the upgraded track. The surface material of the event parking area can be designed to allow for a flexibility in uses. Redevelopment of this area of the park also led to identifying environmental enhancements. In the Base Case Enhanced scheme the park operations building would be relocated within the grandstands and the existing footprint restored to native riparian habitat. Other areas of riparian and habitat restoration have been identified on the concept plan in order to strengthen the City's designated riparian setback.

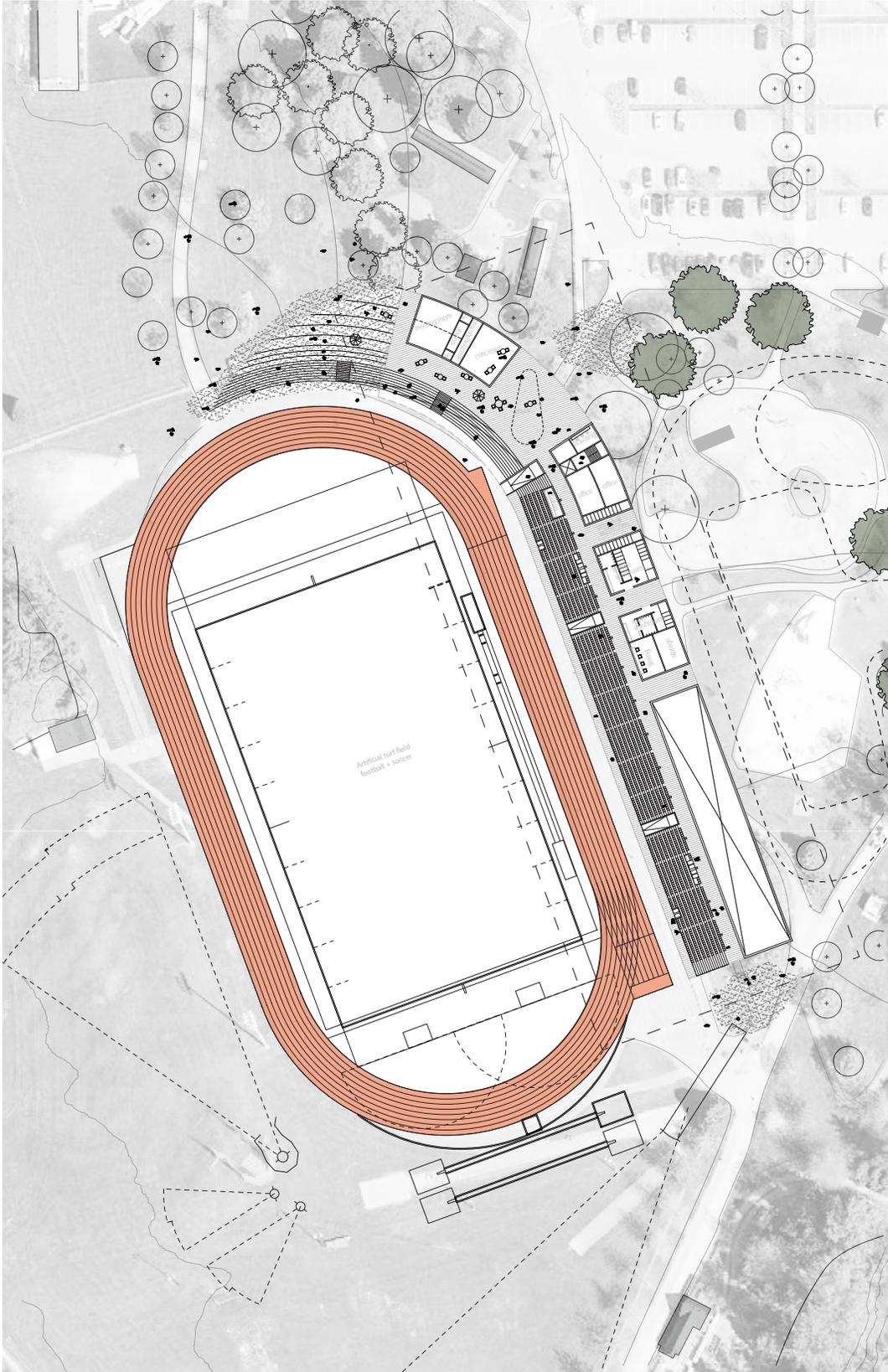


▲ Base Case Enhanced: Overall site concept plan

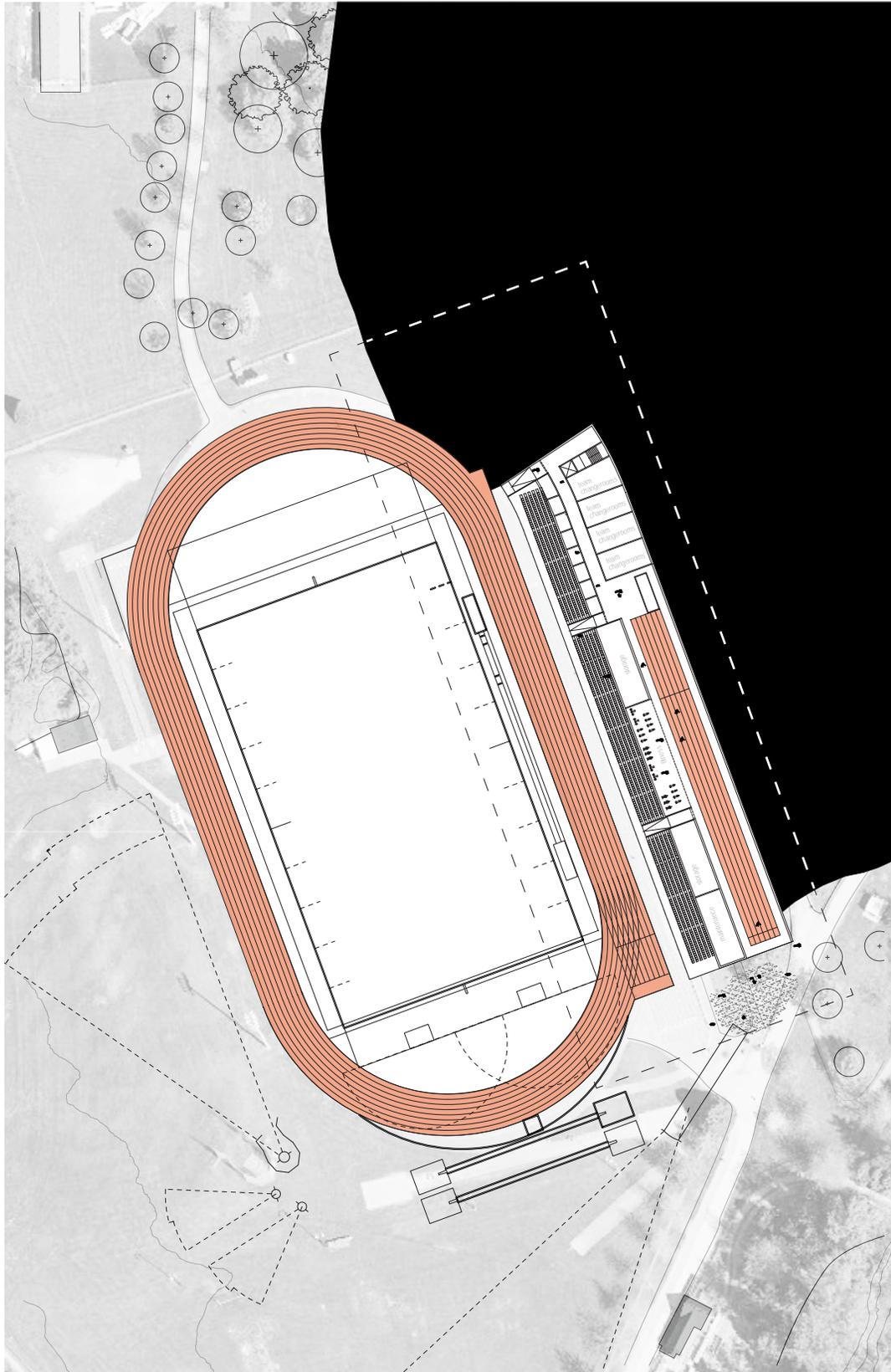
5.3 Base Case Enhanced: Facility Concept Plan



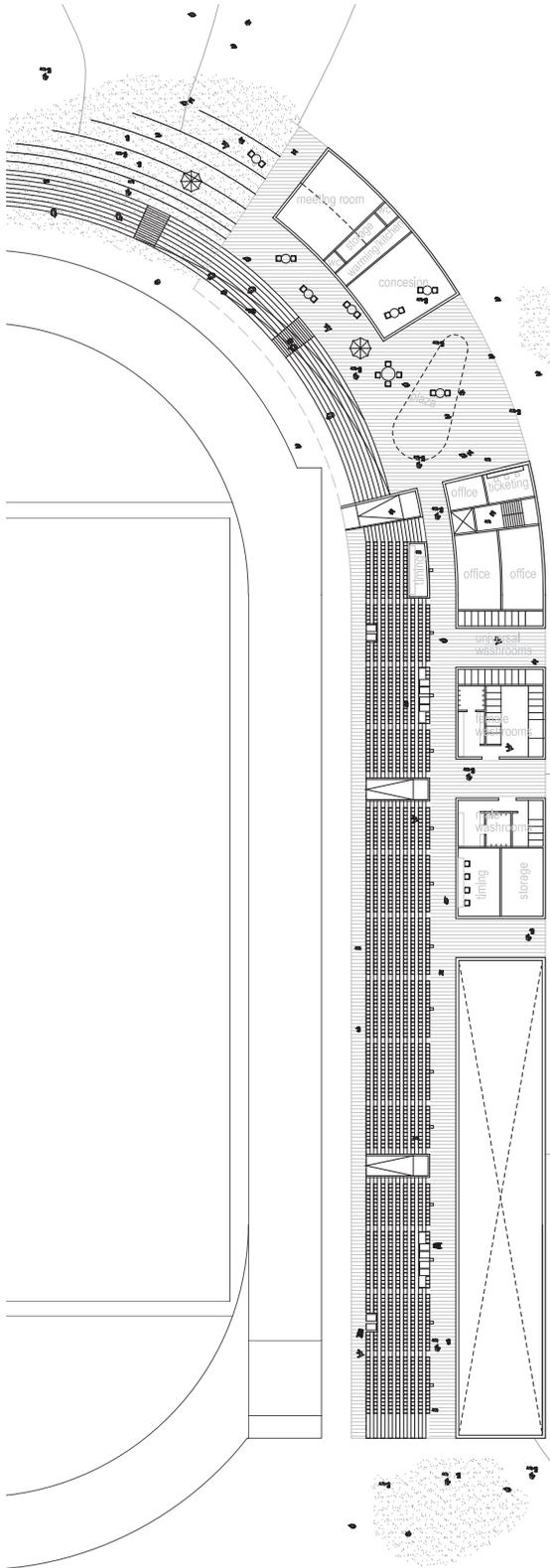
The proposed Base Case Enhanced facility concept design for both the overall park improvements and the Sports Facility were informed by input from analysis of best practice precedents, an analysis of regional track and field facilities, and key stakeholder groups. The concept was informed by a desire to minimize the visual impact of the new facility on the park by nestling the building and grandstand into the landscape through careful attention to the site grading. The facilities public and athletic program elements form a linear bar that runs North South along the length of the track. A community meeting room, concession, washrooms, and changerooms are oriented such that they can be accessed by both general users of the park and by spectators during sporting events. The team changerooms, indoor 80 meter track and fitness area are located on a lower level providing direct access to the track and sports field.



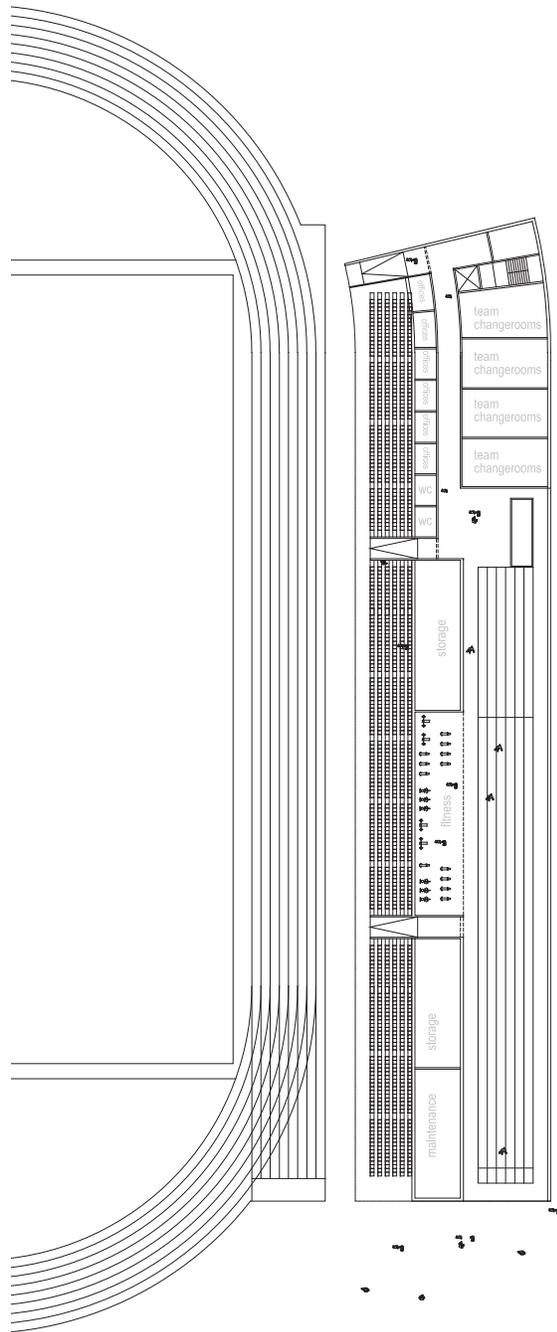
▲ Base Case Enhanced: Overall site plan



▲ Base Case Enhanced: Overall site plan at the facility lower level



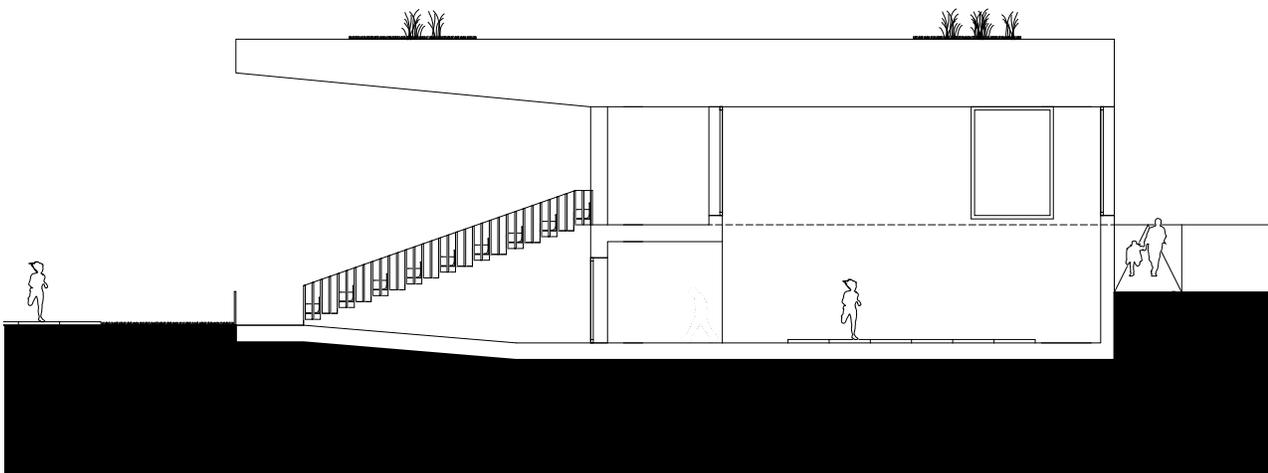
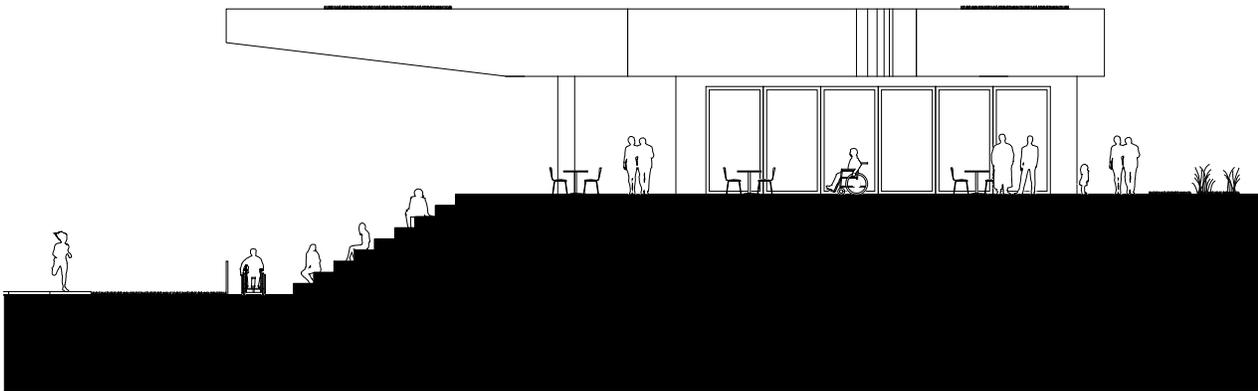
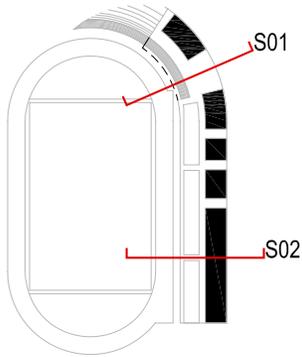
▲ Base Case Enhanced: Ground floor



▲ Base Case Enhanced: Lower level plan



▲ Base Case Enhanced: Sectional perspective of grandstand and indoor track and field facilities



▲ Base Case Enhanced: Sections of grandstand and indoor track and field facilities

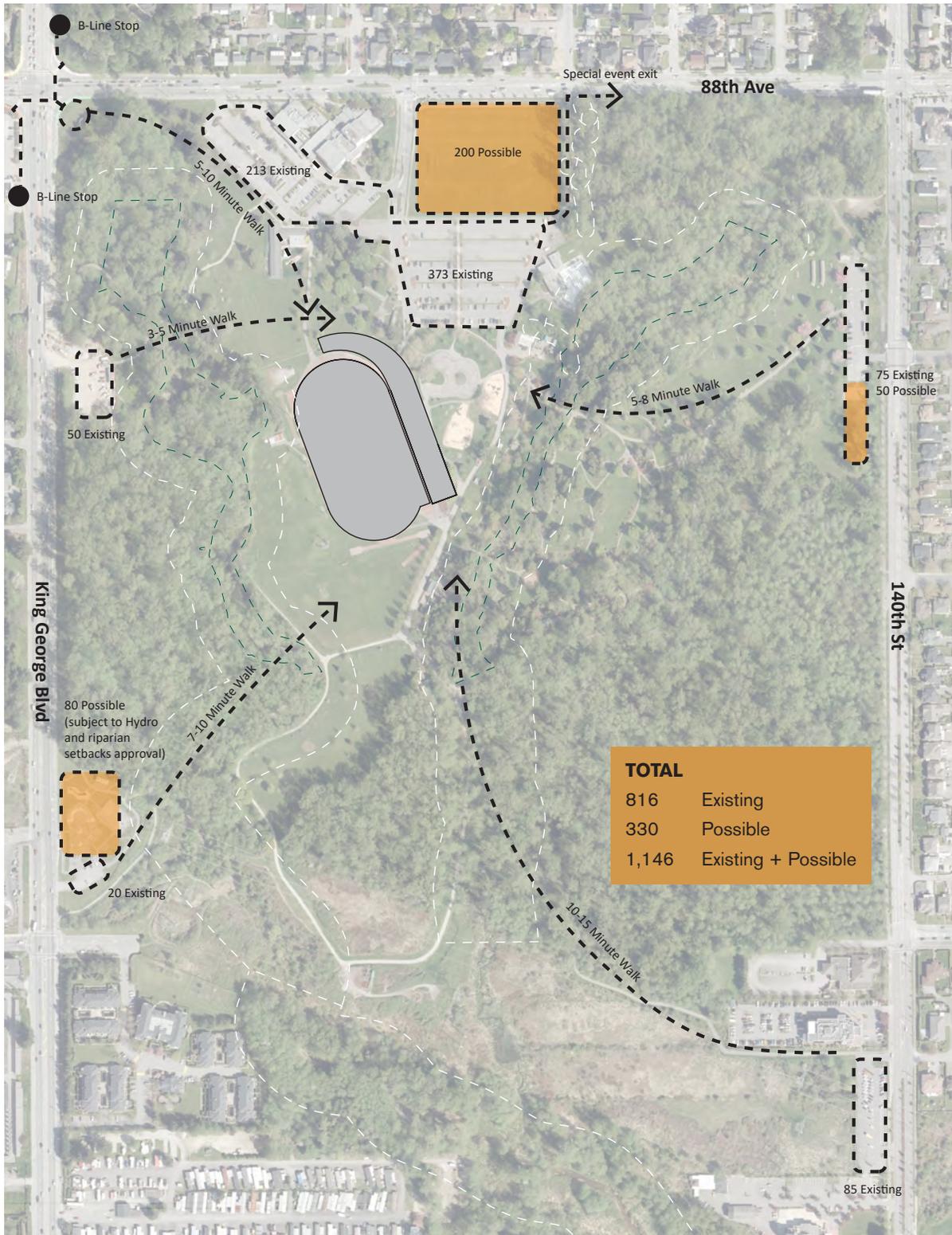
5.4 Base Case Enhanced: Vehicular Access & Parking

The increased seating capacity of the new grandstand and the goal of attracting larger events will impact the existing parking infrastructure. The approach to evaluating the parking capacity and needs was done via the Bunt & Associates parking study. The study identified the need for increased parking capacity to support larger events along with typical daily park users. As identified on page 68. The Base Case Enhanced Sports Facility total proposed new stall count is 1,146, increased from the 816 existing.

The overall vehicular access and parking plan identifies all of the parking lots servicing Bear Creek Park and their proximity to the facility. The approximate walking time (in minutes) has been noted for the existing and proposed pedestrian routes.

The traffic study highlighted the need to provide an additional exit from the main parking lot to alleviate congestion during major events. The new exit is proposed along the east side of the proposed event parking and would be a right turn only onto 88th Avenue.

A high level evaluation of each lot was done to determine if they could be expanded to provide additional capacity. This identified one new area that could be converted to parking, and two other lots that could expand to provide additional capacity. The Base Case Enhanced scheme integrates the 200 possible stalls adjacent to the existing parking lot in addition to 50 possible parking stalls on 140th Street and the 80 possible parking stalls on King George Boulevard.



▲ Base Case Enhanced: Existing and possible parking

5.5 Base Case Enhanced: Capital Cost

CAPITAL COST

It is anticipated, based on the preliminary Class D costing prepared by Ross Templeton + Associates, that the total project cost of the Base Case Enhanced scheme, including soft costs and contingencies, will be approximately \$44 million. Below is a detailed breakdown of the additional cost associated with various site upgrades and additional building program elements. A summary of the construction cost compared to the project cost for the corresponding upgrades is available in the detailed Class D costing report.

Base Case Enhanced Summary

Base Case Cost	\$ 20,983,300
ADD 1 - Site Upgrades: Expanded Plaza and Picnic Area	\$ 580,600
ADD 2 - Site Upgrades: Nature Play, Track Play, Water Park & Walking Track	\$ 3,841,200
ADD 3 - Expanded Riparian Enhancements, Bio swales, and onsite landscaping	\$ 2,587,900
ADD 4 – Site Upgrades: Expanded Drop-off	\$ 257,600
ADD 5 - Parking and circulation: 50 possible parking stalls on 140th Street	\$ 388,600
ADD 6 – Parking and circulation: 80 possible parking stalls on King George Boulevard	\$ 971,400
ADD 7 – Building: Expanded team & training facilities	\$ 10,986,100
ADD 8 – Building: Expanded public facilities	\$ 1,306,400
ADD 9 - Building: Add Green Roof	\$ 2,276,800
 Base Case Enhanced Cost	 \$ 44,179,900

FUNDING

The City's Five-Year Capital Plan (2019 – 2023) identified funding for a new Bear Creek Park Destination Sports Facility. The Capital Plan Commits:

2019	\$700,000
2022	\$2,800,000
2023	\$3,500,000
Total City Funding:	\$7,000,000
Anticipated Grant Funding:	\$14,000,000
Total Project Budget:	\$21,000,000

There is assumption that the project will successfully receive \$14,000,000 in Federal and Provincial grants to support the overall Base Case scheme project budget of approximately \$21,000,000. At this time funding for the additional site upgrades and additional building program elements associated with the Base Case Enhanced scheme is not anticipated.

6.0 Next Steps

6.0 Next Steps

The objective of the feasibility process was to understand what would differentiate this facility from other regional facilities, produce a building program and concept option that has been guided by public input, tested by careful analysis of the site and context. The information contained within this report can be used to make key decisions for the future progression of this project and should be used as the basis for the commencement of schematic design.

The following should also be completed prior to commencement of schematic design:

- Work with BC Hydro to pursue opportunities for funding
- Determine a public art strategy for the project
- Determine the sustainability targets for the project as part of the City's wider green building objectives.
- Further engagement with stakeholders on the reduced site upgrades and building program elements that have been removed from the Base Case scheme.

