## Inter River Park South Sports Field Feasibility & Conceptual Design

Council Sports Field Workshop October 24, 2016









# **Council Workshop**

**Council Sports Field Workshop** October 24, 2016

Agenda:

- 1. Inter River Park: South Sports Field Feasibility & Conceptual Design
- Kirkstone Park ATF Conversion
- 3. District Wide Sports Field Strategy In addition:
- 4. Lynn Valley Trail Loop Proposal

Presented by: Susan Rogers, Parks Manager **Catherine Eiswerth**, Project Manager, Binnie & Associates





# **ATF/Sportsfield Demand**

- Increasing demand for more playing fields in the District  $\bullet$
- District limited to accommodate full sized tournament sportsfields  $\bullet$
- ATF's provide 3-4 times more playable hours than grass sportsfields
- Playable in wet weather and no recovery time from use ullet





### **Stakeholder Process to date:**

- Sportsfield User Group Meeting October 2015
- Sports Advisory Presentation November 2015
- **District Council Workshop January 2016**
- Parks Advisory Committee January 2016
- Sportsfield User Meeting July 2016
- Sport Council- September 2016
- PNEAC September 2016
- Council Workshop October 24, 2016

# **Project Background**

## Site History

- Waste Landfill -1956 to 1988
- Field 1 Opened 1988
- Soil Disposal 1990 Present
- Fields 2, 3 Opened mid 1990's
- Master Plan approved 1995
- Fields 4, 5, 6 Opened 2005
- Fields 7, 8 Opened 2009











Why is upgrading being considered?

- Existing field is uneven with poor drainage
- Total rebuild required

Why an artificial turf field?

- One multi-use ATF is equal to 4 to 6 grass fields
- Strengthen Inter River Park's role as a tournament center
- Pressure taken off District's other grass fields
- Potential increase in bookable hours from 147 hrs. (2015) to 2600 hrs.









# **Artificial Turf Field Concepts**

### 1 Field + Warm-up Option





```
Existing parking
   Proposed parking areas (79)
   (74 ninety degree, 5 parallel)
   Existing bike skills facility
   Proposed drop-off area
   Proposed field lights
   Existing field building /
   washrooms
   Existing sedimentation pond
8) Existing trail entrance
   Existing trees preserved
10) Spectator area
11) Bus parking stalls (2)
12) Service vehicle access
13) Bike skills park drop-off area
14) Parking and event staging
   area
15) Future sport court (by others)
16) Emergency access
17) Future park operations area
```



# **Artificial Turf Field Concepts**

## 2 Field Option

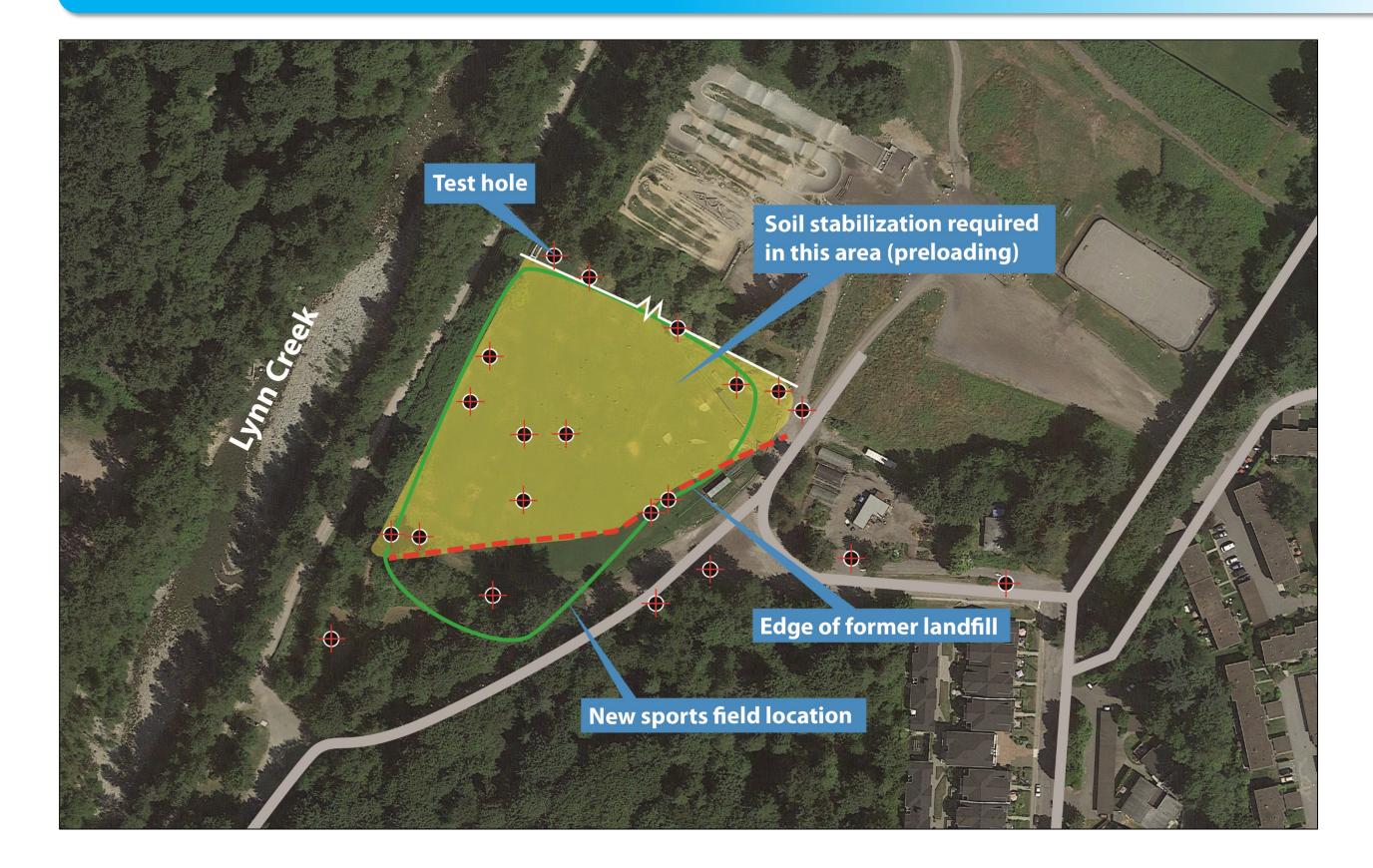




 Existing parking
 Proposed parking areas (ninety degree)
 Existing trail entrance
 Existing sedimentation pond
 Service vehicle access
 Existing trees preserved
 Parking and event staging area



## **Geotechnical Overview**







## **Environmental Overview**

Existing disturbed portion of riparian setback

30m Lynn Creek Riparian Setback Line

**New sports field location** 

Boundary of existing grass field

Lower treed area (some wetland with stormwater and habitat enhancement potential)

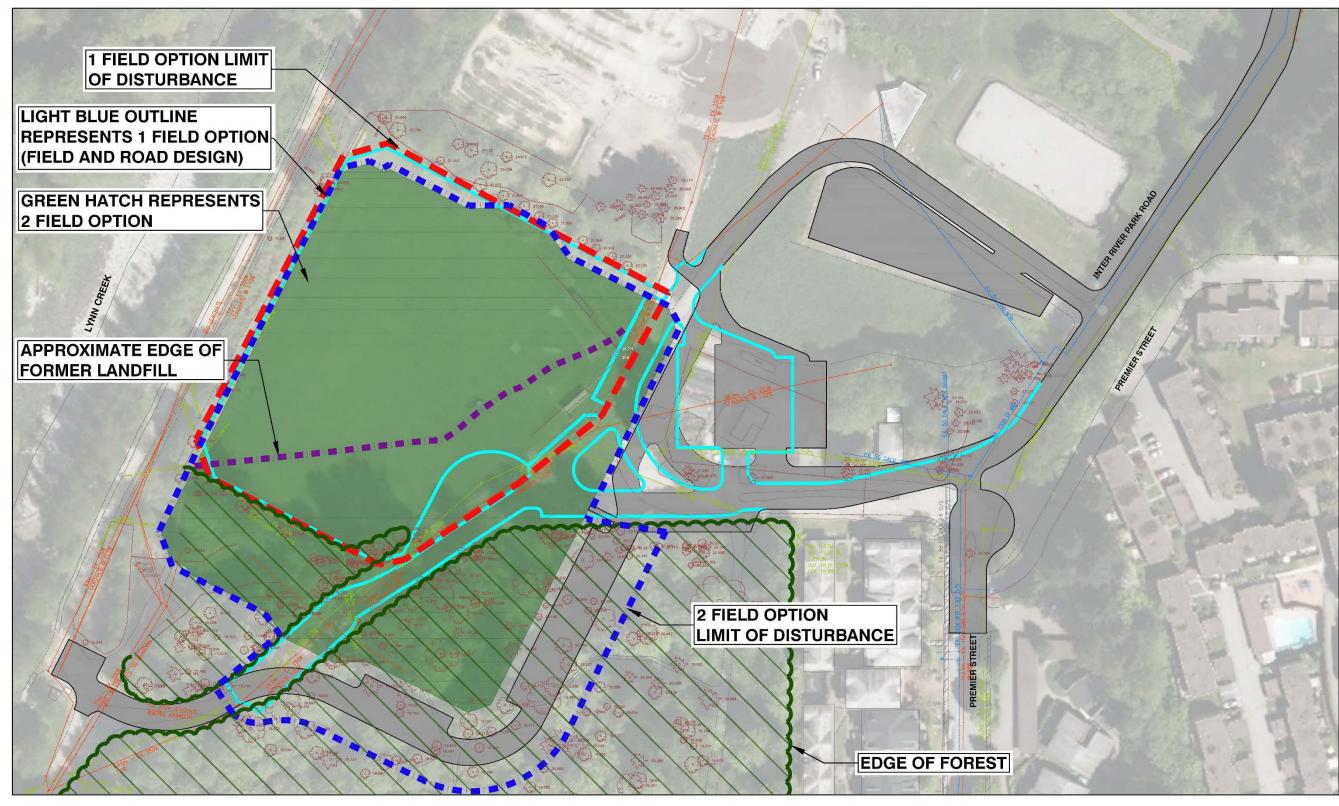
**Boundary of forested area** 







## **Comparison of Artificial Field Concepts**









## **Natural Grass Field Concept**





**Existing parking** Proposed parking areas (ninety degree) 3) Existing bike skills facility **Existing field** building/washrooms 5) Future sport court (by others) **Existing sedimentation** pond Existing trail entrance **Existing trees preserved** 9) Service vehicle access 10) Bike skills park drop-off area 11) Parking and event staging area



# Implications of ATF Options

| Relative Implication of Design Options – 2 ATF Fields |                           | Relative Implication of Design Options – 1 Field + Warm-up |             |                            |                           |             |             |
|---|---------------------------|--|-------------|----------------------------|---------------------------|-------------|-------------|
| Criteria  | No Impact<br>(or Benefit) | Some Impact  | High Impact | Criteria                   | No Impact<br>(or Benefit) | Some Impact | High Impact |
| Tree/Habitat Loss                                     |                           |  |             | Tree/Habitat Loss          |                           |             |             |
| Riparian<br>Encroachment                              |                           |  |             | Riparian<br>Encroachment   |                           |             |             |
| Settlement Potential                                  |                           |  |             | Settlement Potential       |                           |             |             |
| Preload Duration                                      |                           |  |             | Preload Duration           |                           |             |             |
| Ex. Utility Relocation                                |                           |  |             | Ex. Utility Relocation     |                           |             |             |
| Extraordinary Cost                                    |                           |  |             | Extraordinary Cost         |                           |             |             |
| Future Maintenance<br>Risk                            |                           |  |             | Future Maintenance<br>Risk |                           |             |             |
| Parking Demand Met                                    |                           |  |             | Parking Demand Met         |                           |             |             |
| Additional Field<br>Inventory                         |                           |  |             |                            |                           |             |             |





# Implications of ATF vs Grass Options

| <b>Relative Implication of Design Options – Natural Grass Field</b> |                           |             |             |  |
|---|---------------------------|-------------|-------------|--|
| Criteria  | No Impact<br>(or Benefit) | Some Impact | High Impact |  |
| Tree/Habitat Loss   |                           |             |             |  |
| Riparian<br>Encroachment  |                           |             |             |  |
| Settlement Potential  |                           |             |             |  |
| Preload Duration  |                           |             |             |  |
| Ex. Utility Relocation  |                           |             |             |  |
| Extraordinary Cost  |                           |             |             |  |
| Future Maintenance<br>Risk  |                           |             |             |  |
| Parking Demand Met  |                           |             |             |  |

### Relative Implication of Design Options – 1 Field + Warm-up

| Criteria                   | No Impact<br>(or Benefit) | Some Impact | High Impact |
|----------------------------|---------------------------|-------------|-------------|
| Tree/Habitat Loss          |                           |             |             |
| Riparian<br>Encroachment   |                           |             |             |
| Settlement Potential       |                           |             |             |
| Preload Duration           |                           |             |             |
| Ex. Utility Relocation     |                           |             |             |
| Extraordinary Cost         |                           |             |             |
| Future Maintenance<br>Risk |                           |             |             |
| Parking Demand Met         |                           |             |             |





## "Class D" Cost Estimates

Site development costs (ATF Field plus associated infrastructure upgrades)

One field plus warm-up area option: \$5.0 - 5.9 million

Two field option: \$9.5 -10.5 million

Grass field option: \$1.9 million





## **Environmental Impacts of Artificial Turf**

What is the environmental concern about artificial turf?

- Public/media concerns over ATF crumb rubber infill ('soil' portion)
- Ground car/truck tires used for ATF infill
- ATF fibres ('grass' portion) do not pose an elevated risk to health or environment
- Infill safety being studied by United States' EPA report pending
- City of Vancouver no longer using crumb rubber TPE, organic or EPDM infill

## Are there options to crumb rubber?

- A number of infill options TPE, EPDM, Organic, 100% Sand, etc.
- Other infills more costly than crumb rubber (+ \$150K to \$300K per field)





# Public Feedback

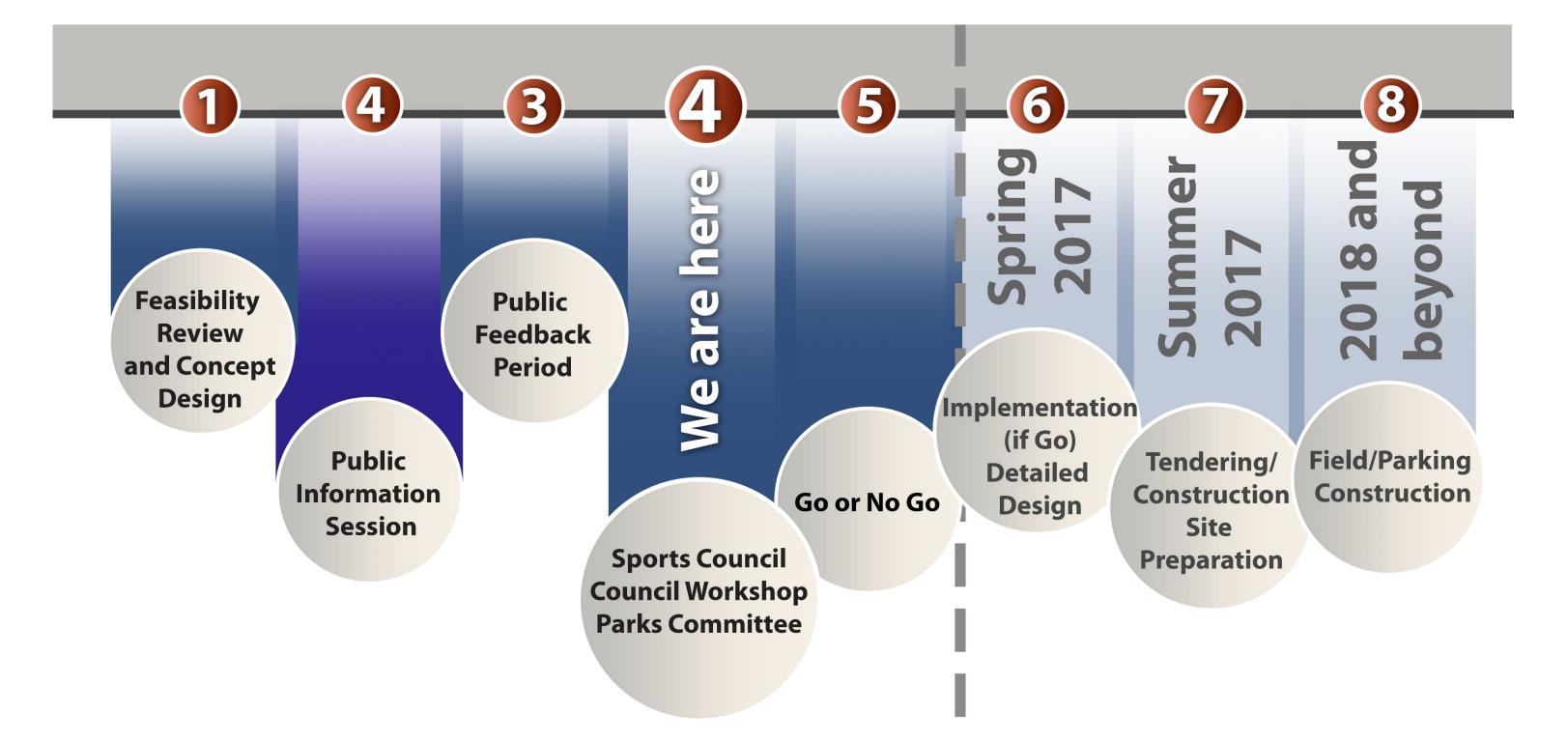
## Main Comments Summarized

- Baseball prefers natural grass option due to impact of ATF on higher level ball
- More people support closing Premier Street than do not
- Concerns about increased traffic, noise, safety, speeding
- I field option preferred over 2 ATF option
- Concerns about deforestation/impact on environment
- Dog walkers are a major user group and hope project won't impact them





## Timeline









## That Council direct staff to proceed with a 2017 Capital Budget request for site preparation for a 1 ATF field plus warm-up option at South Inter River Park.



# Inter River Park- slope expansion project





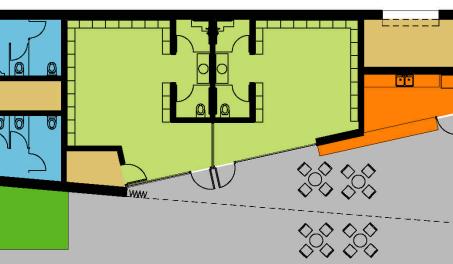




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## **Comments and Questions**

## Thank You!



## **Inter River Park**

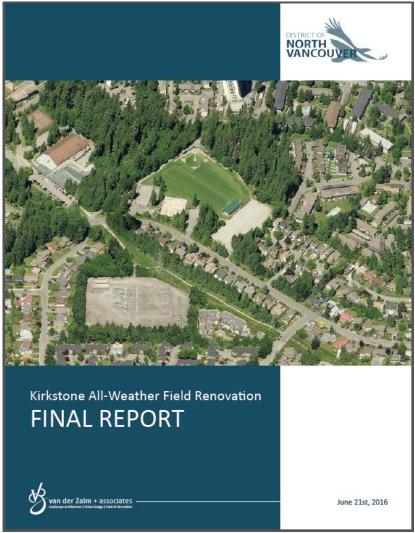
South Sports Field Feasibility and Conceptual Design

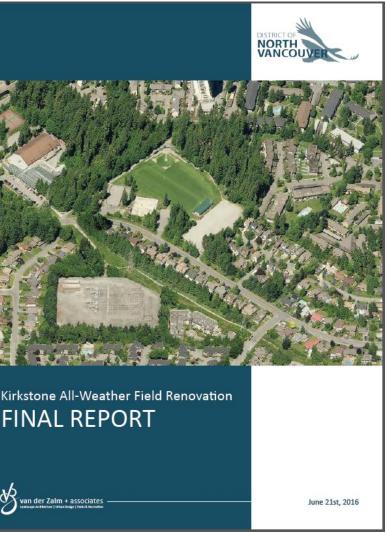




# **Kirkstone ATF Feasibility Study June 2016**

- In 2016 DNV retained van der Zalm + Associates for feasibility review to convert DNV all-weather field to community-level ATF
- DNV has shortage of soccer practice facilities for year round use.
- All weather fields are generally underutilized.
- Kirkstone AW Field has infrastructure required by an ATF. This reduces construction cost without affecting playability
  - Existing field lighting
  - Existing drainage
- The all-weather field at Kirkstone has key infrastructure :
  - Existing parking
  - Existing washroom building
  - Located on a bus route
  - Next to Lynn Valley Growth Center











# **Gravel Field ATF Conversion: Kirkstone Park**

| <ul> <li>Increasing demand for more playing fields</li> </ul>                        | Stakeholo       |
|--|-----------------|
| <ul> <li>Low demand (bookings) for existing gravel fields</li> </ul>                 | Sportsfield Use |
| <ul> <li>Potential increase of bookable hrs from 700 - 2600 hrs. per year</li> </ul> | Sports Advisor  |
| <ul> <li>Limited park areas to expand with new field inventory</li> </ul>            | ·               |
| <ul> <li>Sites are dedicated, flat and have existing field lights</li> </ul>         | District Counci |
| <ul> <li>Gravel conversions cost less than typical ATF fields as lighting</li> </ul> | Parks Advisory  |
| exists; drainage is less costly and less fill is required.                           | Sportsfield Use |
|  | Council Works   |







### der Process:

er Group Meeting - October 2015

ry Presentation - November 2015

il Workshop - January 2016

Committee - January 2016

ser Meeting - July 2016

kshop - October 2016

# **Kirkstone ATF Feasibility Study June 2016**

### **Recommendation:**

- Develop field 47M x 105M marked for Super 8 and full-length field
- Field meet FIFA standard for play
- Field halved for simultaneous games in U6 U10 leagues or broken down for youth practice games.

### **Cost Estimate:**

**Estimated Grand Total** - \$1,200,000.00

Preliminary Concept (VDZ & Associates May 2016)

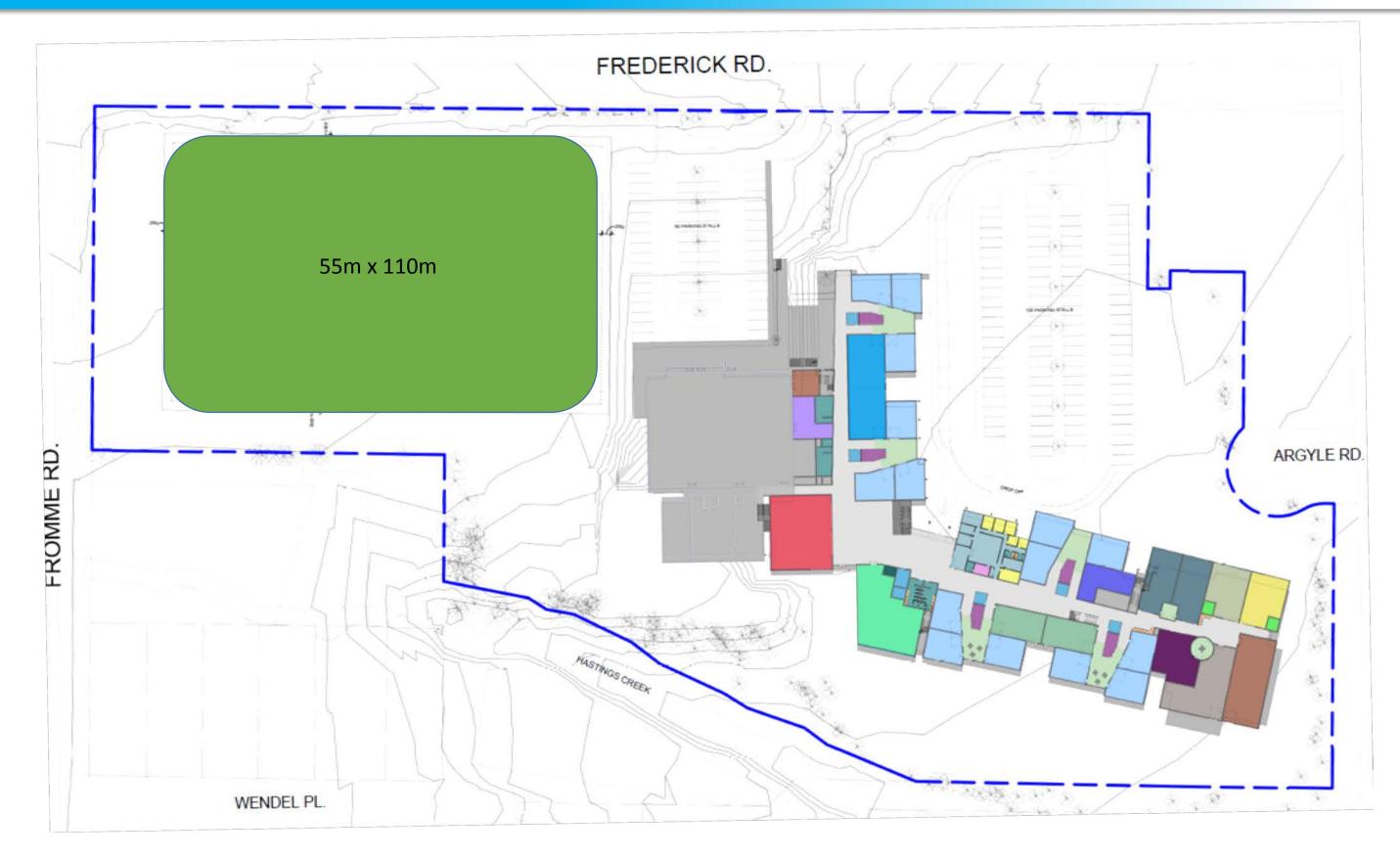


47m x 105m from fence to fence



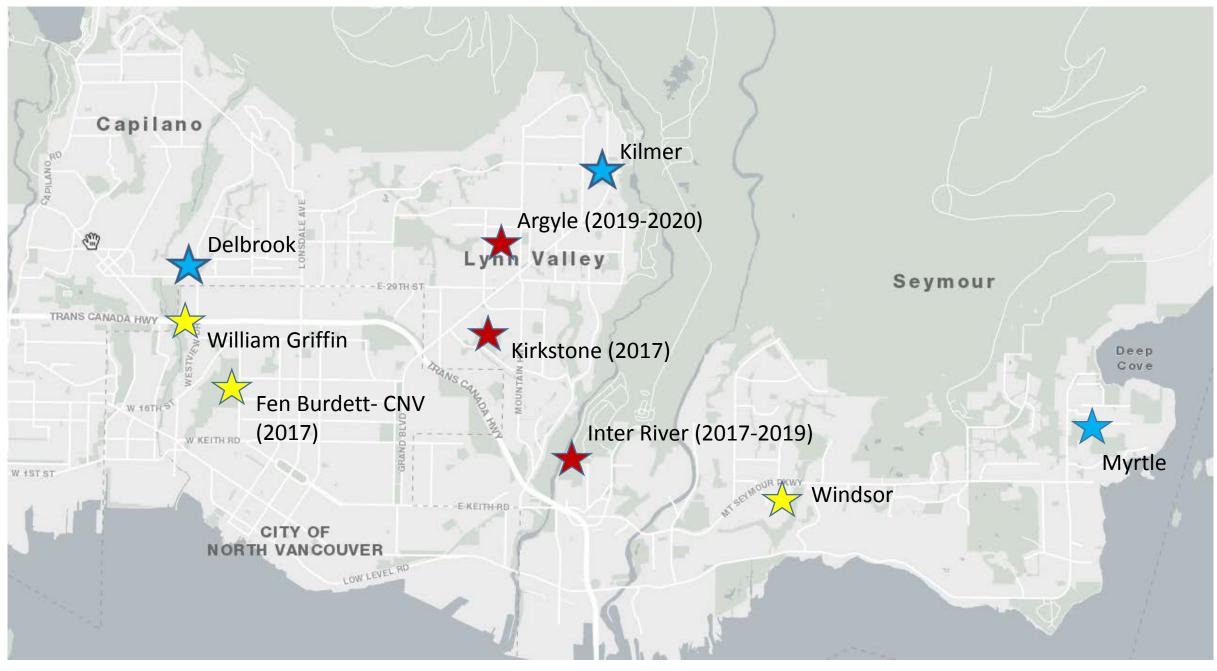


# Argyle Secondary School ATF





# **District Wide Strategy**





In planning or design phase



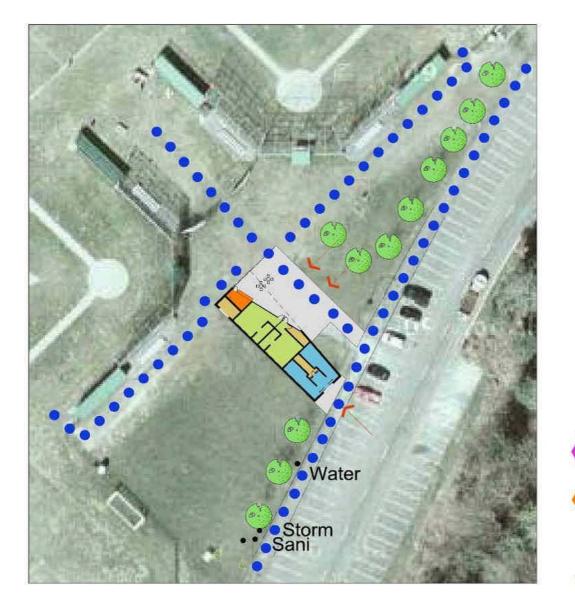
Existing or under construction



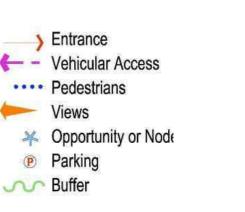
Future potential sites

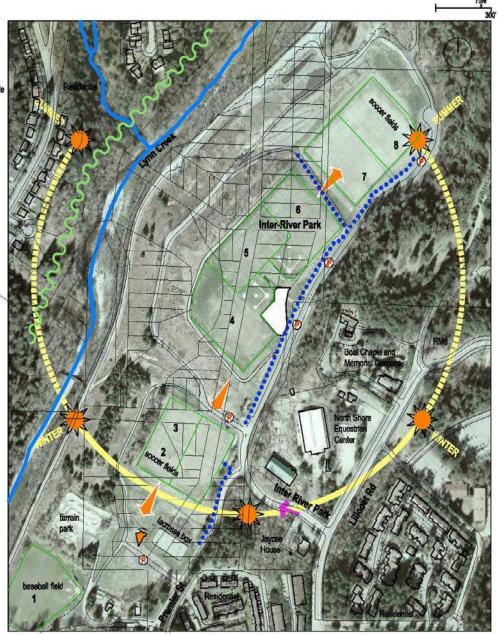


## **Inter River Fieldhouse**













## Summary

| Projects   | 2017   | Costs                              |
|--|--|------------------------------------|
| Inter River Park South Field<br>( Option 1)                      | Detailed design & site prep & preloading<br>Explore partners | 5 m – 5.9 m<br>(Phase 1 –<br>1.5m) |
| Inter River Fieldhouse (north)                                   | Detailed design & construction                               | 1.6 m                              |
| Inter River Fieldhouse (south)                                   | Conceptual planning  | \$70,000                           |
| Kirkstone ATF Field  | Detailed design & construction                               | 1.2 m                              |
| Argyle School  | Continue exploration school with school/community            | TBD                                |
| All weather field conversion to ATF<br>Myrtle, Kilmer & Delbrook | Continue feasibility reviews                                 | TBD<br>Range 1.2 m<br>per field    |
|  |  |                                    |
|  |  |                                    |



