

Strawberry Hill Bike Park





Design

Family oriented, community bike park

Should allow newer riders to build skill in a fun and controlled environment while offering features that are fun for all skill levels.

The basic trail rating system features 4 difficulty levels that may be familiar to skiers: Green circle - Easy Blue square - Intermediate Black diamond - Advanced Double Black Diamond - Most Difficult or Expert

Strawberry Hill will offer mostly Green Cicrle and Blue Square with one Black diamond trail and a double black option.



Start Ramp

Drops

Roll Downs

Rock Garden

Overpass

Skinny

Roller Coaster

Tabletop Jump







Features **Start Ramp** Drops **Roll Downs** Rock Garden Overpass Skinny **Roller** Coaster Tabletop Jump



Starting Feature

Drops

Roll Downs

Rock Garden

Overpass

Skinny

Roller Coaster

Tabletop Jump

Skill Building Feature: Drops

- Practice controlling the bike over drop offs and ledges
- Strong bike control and confidence builder
- Man made drop features less common in back country trails, but natural drops off of roots



Drops

Roll Downs

Rock Garden

Overpass

Skinny

Roller Coaster

Tabletop Jump

Skill Building Feature: Roll Down

- Learn to ride down steep faces
- Tires stay on ground
- Simulates changes terrain



Drops

Roll Downs

Rock Garden

Overpass

Skinny

Roller Coaster

Tabletop Jump

Skill Building Feature: Rock Garden

- Build different levels of difficulty
- Gain experience and confidence riding over stone surfaces.
- Natural rock sections on nearby mountains less intimidating





Overpass Intersections





Drops

Roll Downs

Rock Garden

Overpass

Skinny

Roller Coaster

Tabletop Jump

Trail Feature: Overpass

- Creates a fun way to manage intersections, and allows trails to use the space better
- Intermediate trails only. Beginner trail goes underneath
- Railing to prevent falls



Drops

Roll Downs

Rock Garden

Overpass

Skinny

Roller Coaster

Tabletop Jump



Drops

Roll Downs

Rock Garden

Overpass

Skinny

Roller Coaster

Tabletop Jump



Step-Up Overpass

Drops

Roll Downs

Rock Garden

Overpass

Skinny

Roller Coaster

Tabletop Jump



Drops

Roll Downs

Rock Garden

Overpass

Skinny Roller Coaster

Tabletop Jump

Trail Feature: Skinny & Roller Coaster

- Roller Coaster
- Skinnies



Drops

Roll Downs

Rock Garden

Overpass

Skinny

Roller Coaster

Tabletop Jump

Skill Building Feature: Tabletop Jumps

- Skill Building feature:
- Tabletop Jumps



Safety:

- Design for target users Skills ahead of consequence
- ► Use clear signage
- Create clear sight lines

Intersections, stopped rider, pedestrian

- ► Incorporate gateway features.
- ► Features appear harder than they are.
- ► Fall Zones
- More difficult features are optional with ride arounds
- Slow traffic down for intersections
- Educate riders



Where does Strawberry Hill fit?





Where does Strawberry Hill fit?

Strawberry Hill Bike Park will offer beginner to intermediate experience to build skill and confidence to complement the following riding areas and more:







Sustainable Trail Construction





What is Mineral Soil?

Below the duff layer you will find inorganic mineral soil composed of sand, silt and clay.

This mineral soil is what we want to build trails with. Mineral soil will compact to form a hard trail surface that allows water to run off it, rather than soaking into it.



Even a trail surface built out of ideal mineral soil will get muddy if water is allowed to sit on top of it.

This is why drainage is so important.

Preventing standing water helps prevent mud, ruts, trail erosion, and trail creep.



Let's Talk About Drainage

We are fortunate to have a year-round riding season in much of the PNW which means that a great deal of construction and maintenance effort goes into drainage.



To maintain proper drainage, we need to provide a place for water to flow off the trail.

Also ensure enough out slope to force the water off the trail rather than flowing down it.







Flat Trail

Drainage for Bench Cut Trail

- The example to the right here shows an example of a rolling grade reversal on a bench cut trail.
- The bottom of a grade reversal should have an obvious out slope that allows water to easily flow off trail.



Drainage for Flat Trail

Flat trails often use a ditch for drainage.

- ► The ditch starts approximately 12"-18" wide.
- Should go to daylight so water can evaporate.
- ▶ Width is greater than 2 times the depth.
- Taper the ditch sides into a gentle depression that will be less likely to plug.
- Steep edges could catch a bike tire.

(We will cover this more later)



- All trail drains should run to day light whenever possible. This can be challenging on flat trails. When in doubt clear as much as you can without digging a big hole.
- Flat trails often don't have daylight drains which results in the entire drain filling up. Ditch and basin style drains will often need to be shoveled out to restore the catch basin's effectiveness.



Green Up / Narrow Up

- Replanting the trail to restore the natural vegetation and natural feel.
- Healthy plants help stabilize soil and control erosion
- Stategic placement of ferns helps keep riders on trail



Trail Corridor



Courtesy of IMBA

Trail corridors are built with consideration for sight lines for safety social sustainability. Too narrow of a corridor creates numerous potential hazards such as collision with objects or other riders, as well as nuisances that make the trail less enjoyable like thorns tearing your clothes or scratching your arms.

Corridor includes the trail ceiling. Plants like vine maple and Hazelnut will sag and hang low overhead. This can provide a nice **archway, but only as long as people aren't hitting their head on** branches.





- Route steeper grades / faster speeds in higher visibility areas
- Clear vegetation around turns
- Bring trails close together before a switchback or an intersection
- Bring trails uphill before a blind turn or intersection
- Consider 1-way trails

Evergreen Mountain Bike Alliance

Speed Control



- Route trails uphill into and out of blind corners or before a merge
- Use chicanes and corralling where needed to reduce speed

Thank You





Bainbridge Island Metro Park & Recreation District

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A B C D E F G H I J K	L M N O P
2 Strawberry Hill Construction Cost Estimate	
4	
5 SH Bike Park Trails Director Project Manager Machine Operat Trail Builder Total Cost	
0 Task/Item \$/5/hr \$00/hr \$120/hr \$/5/hr 7 Trail building or 73 200 1200 \$142,400,00	
7 17ail building se 72 200 500 1200 \$143,400.00 8 Materials for wood structures \$120,022.00 \$1	
9 Granite for rock features \$10,530,00	
10 Overtime for weekend work party direction \$10,000,00	
11 Travel expenses \$10,530.00	
12 Tools, equipment, other materials, supplies \$8,424.00	
13 Signage (including installation labor) \$4,212.00	
14 Contingency 15% \$49,054.35	
5 Sub-Total \$376,083.35	
16 Tax 10.25% \$38,548.54	
17 Total \$414,631.89	