

2020 Chip Trail Repairs – Equinox Mile 1 – 1.5



History

The Six Mile Trail started as a brushed out alignment back in the 1960s. As skate skiing became popular a dozer was used to clear stumps and roots in perhaps the 1980s? While this greatly improved the skiing the summer users suffered from wet boggy conditions.

In 1999 the UAF Trails Club obtained a grant and one of the projects was making a loop trail on North campus that could be used without rubber boots. Typar and gravel was installed on the low section of the T-field Road and Chip trails built on two sections of the Six-Mile Trail. For the chip trails plastic culverts were installed at the creeks and several hundred feet of 4 inch perforated pipe was installed to drain other sections. Typar or landscape fabric was rolled out and wood chips spread out.

The help of Facility Services has been greatly appreciated through the years.

Problem

With improved trail conditions use increased dramatically. And as mountain bikes and then fat bikes became popular a new summer use arrived. The wood chips get pushed to the sides. There have been repeated projects to rake chips back to the center and add fresh chips.

The drainage constructed of 4" perf pipe has plugged up. Plus after 20 years the original chips have degraded causing them to impede drainage. Bicycles churn the chips into a black soupy mass and push up ridges that further impede drainage. The mass of soggy chips acts like a dam blocking water from crossing the trail. Hikers and runner hop along the edges of the trail trying to keep their feet dry.

The Equinox Marathon uses the chip trail down to Ballaine Lake and since it is early in the race runners and walkers are 2 and 3 abreast.



Typical Low spot where chips and bicycles block drainage – there are 22 similar spots from campus to Ballaine Lake.

Proposal

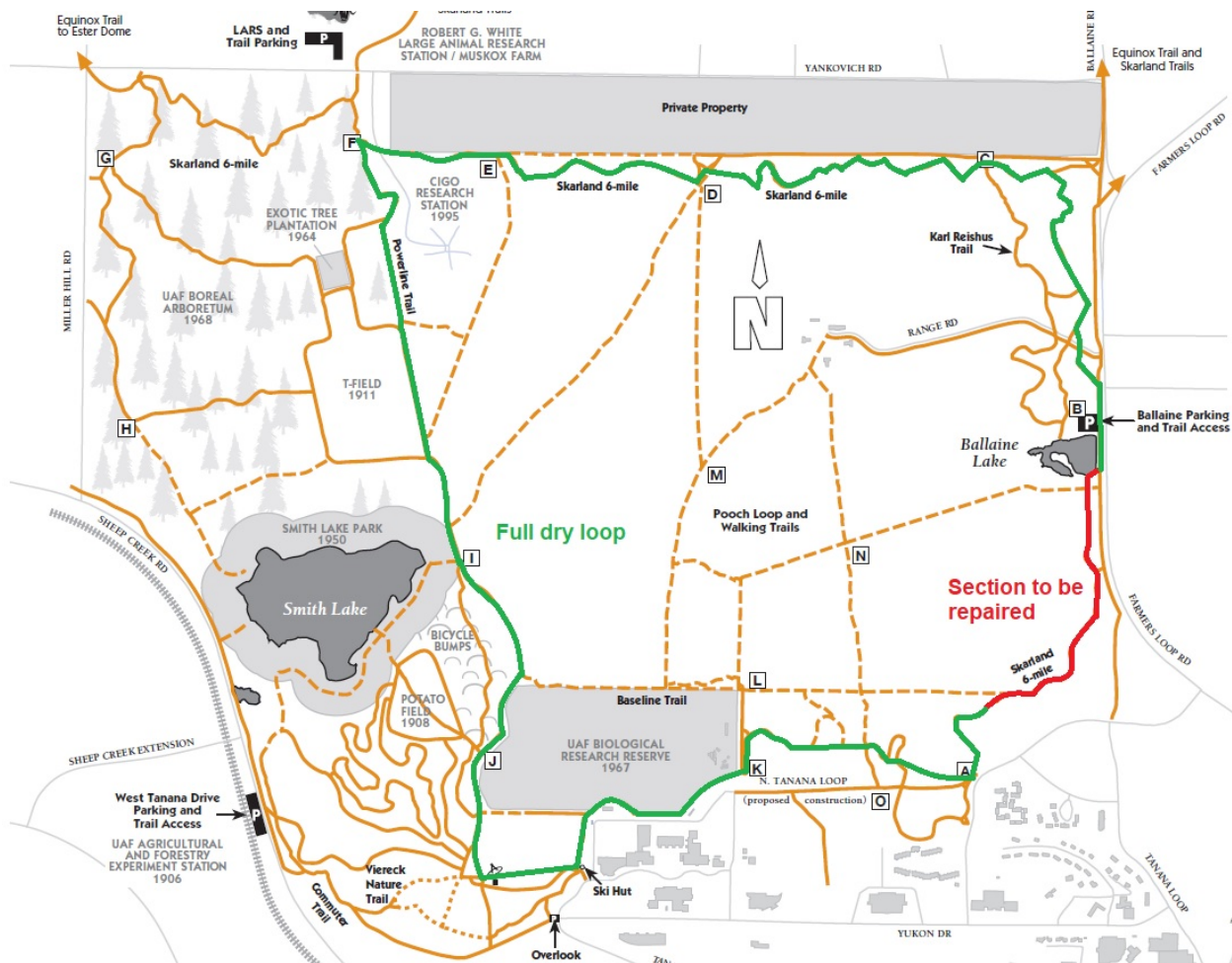
With 20 years of experience we have found that open ditches and plastic culverts work well. Thus we propose to do more of what we have found to work.

As the trail meanders down to Ballaine Lake there are generally side slopes so water will drain away if given the opportunity. There are 3 short sections without side slopes so those would be dealt with by digging shallow ditches along the side of the trail (well outside the winter grooming area) to promote drainage. And at one of the flat sections the well-drained original trail is available and could be improved for summer users.

As originally envisioned once the drainage work was done typar and gravel would be placed on top of existing wood chips but the gravel option is still under discussion. Thus at this point just the drainage work is planned with perhaps some additional wood chips. And the focus is the section of trail from campus down to Ballaine Lake.

Due to the soft clay soils and high moisture content heavy equipment would make a mess. Thus hand work is the most suitable way to do the work.

It is important to not cause problems for snow grooming. Thus catch basins and outfalls would be well outside the groomed area. To ensure the grooming is not interfered with we called for 15 foot culverts. The chip surface would be slightly crowned to promote drainage.



Below is an estimate of the project. Distance is in surveyor notation (4+50 is 450 feet from start). A total to 22 culverts. Guess some 200 man-hours.

0+00	Start is at grooming access trail	
3+15	6" plastic culvert 15 feet long	priority 1
4+50	6" plastic culvert 15 feet long	priority 1
5+10	6" plastic culvert 15 feet long	priority 1
5+55	6" plastic culvert 15 feet long	priority 1
6+00	6" plastic culvert 15 feet long	priority 2
7+00	6" plastic culvert 15 feet long	priority 2
8+75	6" plastic culvert 15 feet long	priority 2
9+30	6" plastic culvert 15 feet long	priority 1
10+18	6" plastic culvert 15 feet long	priority 1
11+00	6" plastic culvert 15 feet long	priority 2
11+60	6" plastic culvert 15 feet long	priority 1
12+15	6" plastic culvert 15 feet long	priority 1
13+25	6" plastic culvert 15 feet long	priority 2
15+30	6" plastic culvert 15 feet long	priority 2
16+60	6" plastic culvert 15 feet long	priority 1
16+97	6" plastic culvert 15 feet long	priority 2
17+25	Swale	priority 2
17+60	Swale	priority 2
17+60	Side ditch	priority 1
19+00	Reset existing culvert	priority 2
21+00	Reroute on original trail	priority 2
23+00	Side ditch	priority 1
23+55	6" plastic culvert 15 feet long	priority 1
23+97	6" plastic culvert 15 feet long	priority 2
24+50	6" plastic culvert 15 feet long	priority 1
25+30	6" plastic culvert 15 feet long	priority 1
26+00	Swales	priority 2
27+00	Swales	priority 2
29+12	6" plastic culvert 12 feet long	priority 1
29+55	Swale	priority 2
29+56	End at bollards where trail goes to bike path	