

GAMEHAVEN PARK PROJECT

PROJECT SCOPE

TRAIL SYSTEM

The core of any nordic venue is the trail system. Careful design of courses that are exciting and enjoyable to ski, aesthetically pleasing, and able to handle major event traffic is essential to creating a top-notch venue.

- Large Start/Finish/Teaching area.
- Biathlon Stadium/Range.
- 2.5km + 3.3 km loops.
 - connected and with cutoffs to create a single 5km loop.
- 1.5 km sprint course (can include terrain from other courses)
 - with cutoffs for 1.2km and 1.0 km distances.
- Small warmup loop (500m) to be used during events in order to keep race network clear.
- Total Trail approx 7km
- Trail widths of 4-12m depending on planned usage.
- Trails designed and constructed for low-snow usability and effective drainage.
- FIS Homologation for all courses.
- Trail lighting for all or most of the trail network.
- Snowmaking for all or most of the trail network.
- Consideration of potential feasibility as a summer venue with mountain bike park / trails.
- Consideration of paving for rollerski loops.

LODGE

The best nordic lodges are designed to offer both utility and comfort. It will be important to design a space with the following in mind:

- Rental and possibly retail.
- Food service.
- Meeting space for races and other events.
- Heated access to start/finish areas for timers and race officials.
- Waxing areas.
- Ski and equipment storage.
- Team space (possibly with locker rooms and strength training facility).
- Admin offices.
- inviting and comfortable spaces for guests.
- Opportunities to view stadium and courses from indoors.

PARKING AND INFRASTRUCTURE

In order for a nordic center to operate at its full potential, infrastructure must be carefully considered. Essential elements include:

- Indoor, heated storage and maintenance space for snowcat and snowmobiles.
- Ample parking for cars and also for buses.
- Water and power for the venue.
- Pump house for snowmaking system.
- Buried pipe and hydrants for snowmaking system.

EQUIPMENT

The equipment needed to operate and maintain a world-class venue is extensive. Some items for initial consideration include:

- Snowcat (PB400 or equivalent)
- Snow mobiles.
- Utility vehicle.
- Grooming implements.
- Signage.
- Fencing / course marking supplies.
- Rental equipment.

INITIAL ESTIMATE OF COSTS FOR CONSIDERATION

CONSULTING/MASTERPLANNING

Jones Nordic Consulting: Masterplanning and project design.

I anticipate that we will want to do at least 2 site visits during planning and construction.

**\$30,000 for first 300 hours
+ travel costs (estimate @ \$1000
per visit) or hourly @ \$110/hr**

Total estimated @ \$40,000

LODGE:

The largest single cost of this project will be the lodge.

\$800,000 - 2 Million +

SNOWMAKING SYSTEM

Prices here vary vastly, and will depend on several factors. The more you are able to spend, the faster you will be able to have the venue operational with man-made snow. It looks as though ample water is available for the project. My estimate is that we will need somewhere between 12-15 million gallons to snow the whole trail system. This would amount to a drop of about 12-14 inches in the water level of 39-acre Gamehaven Lake.

We will want to check local coding regarding noise ordinances. Many resorts are only allowed to operate snowmaking during daylight hours due to the sound created by the guns. From my initial assessment, it looks as though Gamehaven is in a sparsely populated area, which will work to our favor, but an understanding of municipal rules will be essential as we move forward.

A high end, fan-gun system capable of having the entire trail network operational in 3-4 weeks of snowmaking will cost around \$400,000. Less expensive options do exist, including the purchase of used equipment (I've started doing some legwork on this), and the purchase of smaller fan guns or tower systems to snow a smaller percentage of the trail system.

High-end snowmaking system (including pipe infrastructure and pumphouse) **\$400,000**
The purchase of any needed water rights is not included in this estimate.

TRAIL CONSTRUCTION

Estimated cost depends on many factors, including soil composition, vegetation cover, terrain, trail width, etc.

The process for trail construction will include:

- Initial investigation.
- Course Design, marking, initial homologation assessment and GPS mapping.
- Timber Removal (possible to recoup some costs via timber sale)
- Trail cutting. (D8 and D9 Cats are available in Rochester @ \$17,000-\$23,500 for 4 weeks, operators @ \$55/hr)
- Streamflow mitigation
- Trail grading.
- Cleanup / restoration.
- FIS Homologation

Estimate based on available information is that finished trail will cost about \$25,000 per km. **\$175,000 for 7km**

TRAIL MAINTENANCE EQUIPMENT

Total costs will again depend on many factors. A top-end fleet of vehicles, including snowcat, snowmobiles, grooming implements and a snowmaking utility vehicle (probably a pickup truck), as well as other associated items will come to nearly \$500,000.

It is possible to save considerable money by purchasing used equipment. **\$500,000 + \$100,000 for barn.**

TRAIL LIGHTING

There are several different options for trail lighting, from small, solar-powered systems (pending daylight assessment) to large, high-pressure sodium vapor, pole mounted systems.

As with snowmaking noise, light pollution is often regulated by local ordinances. An understanding of local laws will be essential before moving forward.

Smaller systems can be had for about \$10,000 per km, with larger systems costing several times that. If solar is not possible, then we will need to consider electrical infrastructure as well.

High-end light system with associated infrastructure: **\$350,000**

INFRASTRUCTURE AND PERMITTING

These costs are hard to estimate remotely, as they will depend on proximity of existing services to Gamehaven Park as well as on rates for local contractors. Some research in the Rochester area should yield accurate numbers.

- Permitting for work to be done at Gamehaven.
- Electricity (both 110 and 220v / 3-phase).
- Water (For Drinking and lodge use. Snowmaking water will come from Gamehaven Lake).
- Parking and roadway creation. (this estimate includes a paved parking lot. Gravel is much less expensive)

\$ 500,000 (best guess)

ESTIATED PROJECT TOTAL

\$2,065,000 PLUS LODGE

This is very much an initial estimate. We will be able to refine this number considerably after meeting to discuss various parameters of the project and conducting associated research.

This estimate is for new, high end equipment and top-level infrastructure. Many cost-cutting measures are available if needed.

OTHER ESSENTIAL CONSIDERATIONS

ONGOING VENUE OPERATIONS AND MAINTENANCE

This is an essential element of planning that new venues often fail to completely understand. There are many elements to consider here, including but certainly not limited to:

- Will the venue be run for profit or as a non-profit?
- Will income be able to support operational costs?
- Would we want to consider allowing a private contractor to operate any or all aspects of the day-to-day operations?
- Do we need to consider other revenue streams for the venue?
- Will day-to-day operation be endowed?

Costs of operation include:

- Staff.
- Insurance.
- Electricity (snowmaking uses LOTS of electricity).
- Water.
- Equipment Maintenance.
- Fuel (Grooming and trail maintenance uses LOTS of fuel).
- Facility Maintenance.
- Marketing.