

Lake Limerick Country Club Project Proposal

Slalom Ski Course

1. **The person or Committee proposing the project.**

The LLCC Ski Club submits this proposal to the Lake Dam Committee and thence to the Board of Directors for consideration.

2. **The project's description/scope including:**

a. **Background:**

- i. A slalom ski course has been in use and present on the lake since the early 70's. Portable courses were used throughout the 70s and 80s. A current member remembers his high school graduation party being at the lake and it was the first time he skied the course in 1984.
- ii. A temporary course was installed in 1992, as the skiing community became more organized.
- iii. In either 1996 or 1997, LLCC paid for the parts that went into the "floating course" that subsequently was retired 4 years ago. The floating course cost around \$1000 and was assembled from gathered parts and installed by volunteers.
- iv. In 2015, after about 19 years of use, the floating course was beyond repair (air fittings had deteriorated and buoyancy could not be maintained). So a member provided a temporary course once again for use. The intent of the temporary course was to try several different locations on the lake to identify a new optimal location and so that a new improved course could be planned for and a project proposal created.

b. **Narrative description of the project:**

It is proposed that a new stationary slalom course be installed on Lake Limerick that utilizes current technologies and methods, including individually anchored sub-buoys placed several feet below the surface with removable surface buoys that can be easily placed and removed. The course will be installed according to the American Water Ski Association guidelines.

c. **The project's purpose and the value LLCC members will receive from the completed project, including any health and safety improvement aspects:**

A slalom course provides a recreational amenity in a similar fashion as other member athletic amenities (tennis courts, basketball courts, horse shoes, swimming, kayaking, etc).

d. **Such drawings and sketches as necessary to understand the project:**

See attached details and drawings.

e. **The approximate cost for the project, and the basis and assumptions for that cost estimate:**

The project will require the purchase of materials (cement, hardware, floats), the construction of cement anchors and the precise placement of those anchors using survey equipment. A detailed parts list and work outline is provided in the attachment. The overall gross cost (excluding some maintenance department hours) is estimated at **\$3825.00**, plus tax. However, the Ski Club will provide some internally generated funding to help defray costs (and has received pledges for \$1300 and material donations of \$200). With tax (estimate \$325), the estimated net cost is therefore **\$2650**.

- a. **A recommendation as to whether the project should be delivered in-house with LLCC staff, use outside contractors or consultants, or be carried out by a combination of in-house and outside resources:**

Some work is to be done by volunteers; it is also anticipated that the maintenance crew could assist with logistical support and concrete work, possibly in the maintenance yard or one of the parks. It is expected that through contacts with the American Water Ski Association, we will contract with a scuba diver and support person capable of "sighting" the course with a theodolite or similar survey instrument.

- b. **An approximate schedule, including any time constraints regarding project activities or completion date:**

See the plan attached, it is anticipated that the preparation activities will occur over the spring of 2019 and that the course anchors can be placed in May or June.

4. **The budget status of the project** (e.g. Has a Committee, and/or the Board, already included the project in the current year's budget? Is it in a longer range capital improvement plan? Is it a new idea coming in outside the normal budget cycle?):

Funding for a slalom course was initiated and approved by the Board of Directors in the 2012-2013 LLCC Budget (estimated at \$5000). Over the last several years, the carry-over line item was dropped for this project (and numerous others). It was expected that the item would be considered once a viable proposal was developed. The Ski Club will provide some internally generated funding with LLCC covering the remaining expenditure.

5. **Any additional considerations the Board may need to consider, including any foreseeable project risks or liabilities:**

As mentioned, it is expected that through contacts with the American Water Ski Association, we will contract for the "sighting" the course. There are very few folks with this expertise in the USA. We are fortunate in that members of the LLCC community personally know two folks that are trained to sight a slalom course. Only one is in state (Greg Tate), and the other is the national expert (Ed Brazil). So, obtaining multiple quotes will therefore be difficult.

6. **The proposed project manager:**

The Ski Club will provide two project managers. Tim Reber will coordinate the anchor build and Tom Rehder will coordinate the course installation.

7. **Evidence of coordination with the appropriate staff departments and management and the staff's recommendation:**

The proposal was reviewed with the Community Association Manager and a draft copy was provided to the Maintenance department (12/19). The Lake Dam committee will review at their February meeting.

Note:

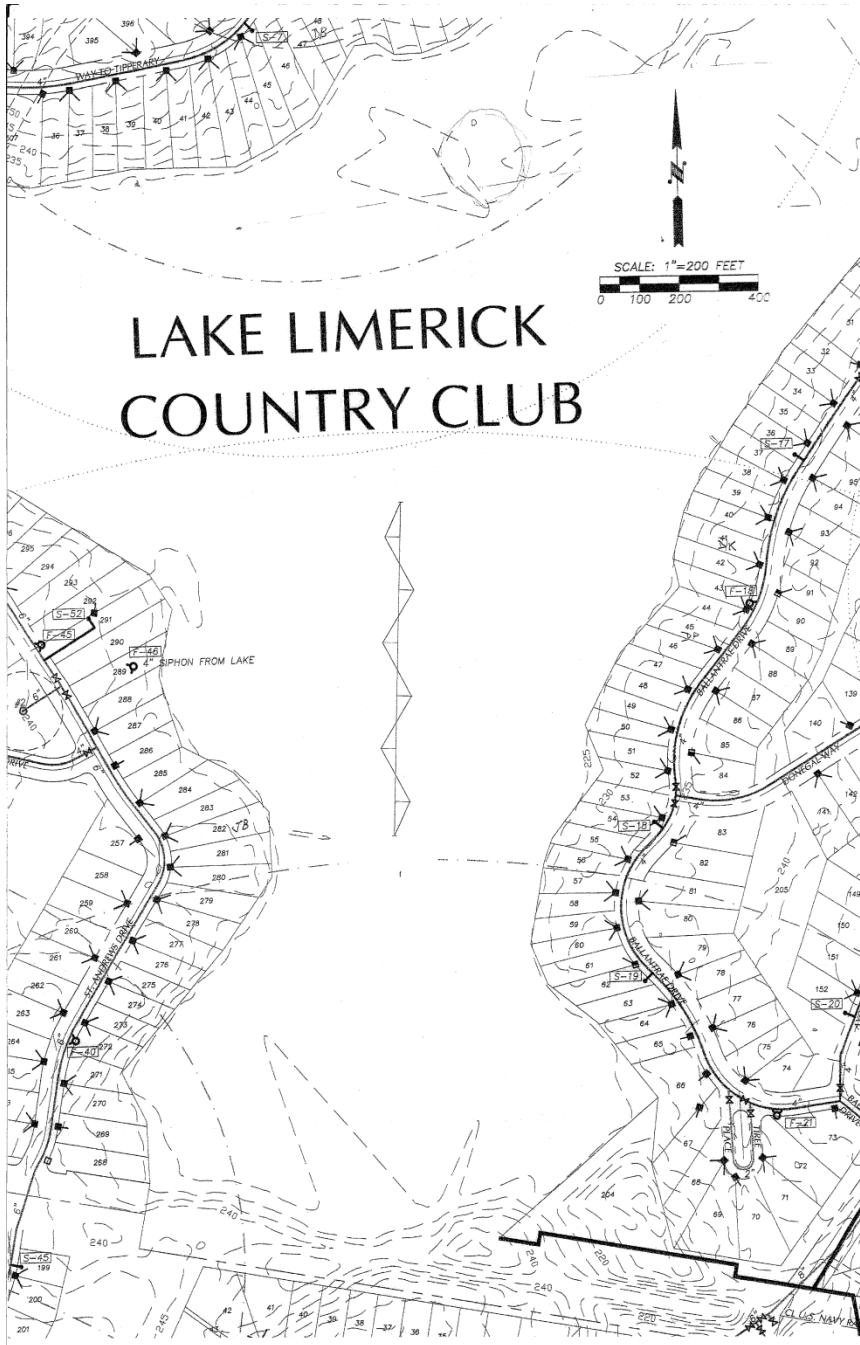
The proposal reviewed and submitted by the following Ski Club Members

Bird, Don	Hartley, Barney	Rock, Mike
Jensen, Mike	Kuh, Brian & Sarah	Raemer, Brett
Kohler, Dave	Landsverk, Duane	Raemer, Mark
Reber, Tim	Linke, Fred & Kat	Sandquist, Martha
Rehder, Tom & Zoey	McRoberts, John	Wieland, Kelly

Attachments:

1. Course Placement
2. Buoy and Anchor Design
3. Materials and Parts List
4. Schedule of Activities

Course Placement Schematic



Buoy and Anchor Prototype

A prototype was built:



Materials and Parts List

Line	Item	Count	Unit	Extended
1	32 Underwater Anchors: 16"x 8"x 8" each, 60lbs each (2 bags of quickrete per anchor)	32	\$ 16.00	\$ 512.00
2	32 Eye Bolts: ¼" galvanized, 4" long with nut (may use stainless steel)	32	\$ 1.95	\$ 62.40
3	32 PlasDc Clips: To aVach Sub Bouy line to eye bolt in anchor	0	\$ 2.19	\$ -
4	32 Sub Buoys: Swim lane style with channel through the middle for line to pass through	32	\$ 5.00	\$ 160.00
5	32 Sub Buoy Top Clips: For attaching and removing bungee line and turn ball	32	\$ 2.19	\$ 70.08
6	32 Turn Ball Clips: For securing bungee to turn ball	0	\$ 2.19	\$ -
7	32 Turn Balls: Various colors as required	32	\$ 10.00	\$ 320.00
8	Transit Sighting Course: Based on direct conversation with Ed Brazil, 3 days	1	\$ 2,500.00	\$ 2,500.00
9	Anchor line *** Donated	1	\$ 100.00	\$ 100.00
10	Bungee line *** Donated	1	\$ 100.00	\$ 100.00
	Sub-Total			\$ 3,824.48
	Less material donation for Anchor and Bungee line			\$ 200.00
	Less Ski Club donations			\$ 1,300.00
	Projected Cost			\$ 2,324.48

Schedule of Activities

The following is a proposed schedule of the activities, subject to change.

1. Sub team organization meeting - done
2. Draft project description - done
3. Share project description with the skiing community, include names in proposal - done
4. Create a course design schematic to scale - done
5. Solicit pledges from ski club - done (\$1300)
6. Get contractor quotes - Ken
7. Complete overall proposal (proposal includes Project Description, Design Schematic, Bill of Materials, Quotes, Schedule, etc.) - done
8. Schedule Maintenance meeting (likely on a Friday) - done
9. Meeting with LLCC Community Association Manager and possibly Maintenance (get their input, assistance with anchors, logistics, build location, etc.) - done
10. Submit Proposal to L/D, target January 25, 2019
11. Gain LLCC approval with proposal (L/D reviews at February 2nd meeting, and hopefully sends it on to the Board) - Ski club members attend 02/02/2019 meeting to answer questions.
12. Collect on pledged donations from Ski club and others after approval - Zoey Rehder
13. Purchase supplies - ask manager / maintenance or we voucher
14. Determine anchor build and storage location - ask manager / maintenance
15. Fabrication of anchors - April - Tim Reber
16. Installation - May-June - Tom Rehder