**Building Up the Tradition**

*Belleayre Mountain Ski Center adds Legacy fabric building to ease congestion at ski lodge.*

HIGHMOUNT, N.Y. – The “Miracle on Ice” U.S. men’s hockey team is generally the first thing that comes to mind when recalling the 1980 Winter Olympics in Lake Placid, New York. Considering the expensive bid process and enormous infrastructure implications for host cities more than three decades later, it almost feels like a miracle in itself that such a small resort town was the setting for that historical event, much less that it was the second time the city had hosted the Games.

Part of what made Lake Placid a success was the local leadership’s diligence in keeping the area viable as a first-class Olympic venue between 1932 and 1980. In 1981, the state legislature established the New York State Olympic Regional Development Authority (ORDA) to manage the facilities used during the 1980 Olympics. The goal was to both preserve the original investment for potential future bids, and to optimize the year-round use of the facilities at Lake Placid and the surrounding area.

Today, ORDA is still responsible for the Olympic Center, but also operates three distinct recreational ski areas in Whiteface Mountain, Gore Mountain, and Belleayre Mountain. Located 200 miles from Lake Placid in Catskill State Park near Highmount, New York, Belleayre Mountain Ski Center was the last to come under ORDA’s purview, in 2012.

Belleayre’s beginnings track way back to 1885, when the mountain was declared “Forever Wild” by the New York State Forest Preserve. Always viewed as an appealing ski site by locals, the mountain was finally developed in 1949, opening to skiers with five trails and the first chairlift in the state.

Even before its affiliation with ORDA, Belleayre was continually looking to break new ground, keeping its eyes on the future and adding trails, lifts, equipment and staff as necessary to accomplish its expansion objectives. The number of skier and snowboarders coming through annually was approximately 70,000 in 1995, and has since risen to more than 175,000 visitors from all around the world.

The growth at Belleayre Mountain was putting particular strain on its Discovery Lodge, a full-service lodge for beginning to novice skiers. “On a weekend we’ll probably run about 2,000 skiers through the Discovery area,” said Tom Tar, general manager at Belleayre Mountain. “Our rentals and kids program were both operated out of the ground floor of the lodge. There just wasn’t enough room. We had grown beyond the point where the lodge itself could handle our skier traffic.”

To ease the burden, Belleayre sought bids for construction of a new facility that would sit adjacent to the lodge. Legacy Building Solutions won the contract to provide a tension fabric structure on the site.

Eventually completed on Christmas Eve 2014, the building measures 50 feet wide by 120 feet long with 7/12 roof pitch and an 11-foot, 6-inch exterior overhang. Inside the structure, various build-outs were created to accommodate eight counters for ticket sales (replacing a smaller ticketing structure that was demolished), all rental equipment, 20 to 25 technicians in a repair and tune-up shop, a guest service area, and a utilities room.

“It made everything more efficient,” said Tar. “Our ski and boot techs have more space. And it’s more logical to have all the equipment and ticketing in closer proximity. We even have our team of mountain ambassadors in there. But the big thing was moving the rentals out of the ground floor of the lodge – we were able to expand our kids program and create more seating for the general public.”

To help maintain warmer temperatures in the winter, the Legacy building uses R-30 fiberglass batt insulation within an interior fabric liner. However, a 12- by 80-foot section of the building peak was left uninsulated to allow natural daylighting through the polyethylene fabric.

“We had the option of keeping a translucent top, which I’m really glad we took advantage of,” said Tar. “It lets a good amount of daylight into the building so it doesn’t feel so closed up in there.”

The building was the first at Belleayre to be cladded with a fabric exterior, although Tar was familiar with fabric structures at other ski areas in the region. The key differentiator from other fabric building suppliers is Legacy’s solid beam engineering concept, which utilized structural steel I-beams instead of the web truss frames that most fabric structure companies still offer. The rigid frame design allows for easier customization, in addition to added strength and longevity.

“Cost was the initial factor for selecting Legacy,” said Tar, “but once we saw the engineering that goes into their design, we liked the compatibility of the conventional construction and saw that could make it easy for us to expand the building in later phases.”

In the summer of 2015, Belleayre added entrance vestibules that were outside the original project scope. With the fabric building resting just 22 feet from Discovery Lodge, the center may even look to connect the two structures at some point.

Looking even further ahead, Tar noted that the solid steel design could even allow them to engineer another type of roof or siding system 20 years down the road. “With other fabric structures, that’s the building you’re stuck with,” he said. “We have some flexibility with this building, and there are a lot of future possibilities we could explore.”

Within the current building, the I-beam design was also beneficial in being able to easily engineer the structure to handle additional loads on the frame, including sprinklers, heaters and lighting. Legacy’s exclusive cavity ventilation system was implemented to enhance air flow.

To meet all local building regulations, the fabric structure is designed to withstand ground snow of 50 pounds per square foot, roof snow of 33.5 pounds per square foot, and 90 mile-per-hour windspeed. It is also designed to meet seismic zone “B” design codes, and includes icebreakers along the roof overhang edges for added safety around the building.

Legacy’s in-house, professional installation crews had a tougher-than-normal test, as a cold blast hit the area during the scheduled construction period. “The guys that came in and constructed the building worked under some really, really tough conditions,” said Tar. “It had gotten really cold, but they plugged away and were very efficient. We were down to the wire, but they wrapped it up on the afternoon of Christmas Eve, and the building opened Christmas morning.”

“Working with Legacy was great,” Tar added. “They were very responsive to any questions we had, phone calls, emails, you name it. It was really a pleasure to work with them.”

Even though they were always optimistic and confident about how the new building would turn out, Tar said everyone was still pleasantly surprised when they went inside for the first time. “Once visitors got into the building and we experienced the interior environment with the heat flow and the insulation, we were very satisfied,” he said.

Having completed the new facility, Tar and his team shifted into observation mode to see how the Legacy building would blend in with the existing lodge. Seeing how the skiers naturally move around in a traffic pattern from building to building will help Belleayre set new goals for enhancing the area as a whole.

With any luck, the dogged determination of the Lake Placid community and ORDA could eventually bring another Olympics to the area, though many believe the only possibility of hosting again would be on a regional basis in conjunction with other cities. While Belleayre Mountain isn’t likely to ever see actual Olympic action on its slopes, the possibility of being just a small part of the overall experience would obviously be rewarding. In the meantime, as the center continues to invest in innovative facilities, its visitors are being rewarded already.

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