

## **GE Johnson**

### **Castle Pines Golf Club**

#### **11 - Best Building Project – General Contractor (\$10 Million to \$40 Million)**

##### **Overview**

The Castle Pines Golf Club was designed by the “Golden Bear” himself, PGA legend Jack Nicklaus, and has remained one of the premier golf clubs in the nation since its opening in 1981. Located in Castle Pines, Colorado, this 19-year-old golf club provides a 360-degree panorama of iconic Colorado scenery. To maintain their excellent reputation, they carefully selected GE Johnson as their contractor for their renovations and additions. The project scope included renovation of the existing clubhouse, an east addition, and demolition and rebuild of the Club’s iconic observation tower. The tower renovation included a new, in-ground wine cave to treat guests to a one-of-a-kind tasting experience. Selective renovations took place throughout the facility, including the main entry, kitchen, gathering spaces, pro shop, and women’s locker room. The project was undertaken with extremely tight design, permitting, and construction deadlines, along with exquisite finishes, and complex construction detailing with old world craftsmanship.

The full interior remodel of the existing clubhouse facility required complete demolition and reconstruction of the existing building, expansion and reconfiguration of the commercial kitchen, the addition of a new social spot called Jimmy’s Bar, expansion of the Mixed Grill Terrace, a new boardroom addition, and complete refinishing of the world class men’s locker room.

The new 11,000-square-foot, two-story building addition houses the new fitness center and treatment rooms on the lower level and the expanded world class men’s locker room featuring a new spa, steam room, and additional relaxation rooms. The new 100-foot-tall rhyolite stone-clad tower is complete with an elegant observation deck, glass handrails, and a glass elevator enclosure with magnificent views of the front range spanning from Pikes Peak to Mt. Evans. The new tower, also features, an elegant underground wine cave that rests 23 feet below grade, holding a capacity of 8,000 bottles of intriguing wines.

##### **Solutions of Special Projects:**

The team managed an extremely tight design and construction schedule to perform most of the construction during the Club's off-season, mid-October through mid-June. Staggered start times and shifts were implemented on a 6-day schedule to allow work beyond an 8-hour workday. Due to time constraints, the design had to be completed in phases to begin construction prior to full-building permit issuance. To begin the project on time and build efficiently, there was an expanded amount of construction enabling activities.

Castle Pines Golf Club proudly hosted The International, a professional golf tournament on the PGA Tour, for 21 seasons from 1986-2006. This event resulted in years-worth of built-up fiber optic infrastructure. Updating the communications systems proved to be a challenge as existing utilities had to be moved prior to the start of construction.

The addition of the observation tower and wine cave included full excavation, foundation, and construction against an active roadway and the existing clubhouse building. The team had to have a strong understanding of the unique code requirements for the tower deck and its glass elevator enclosure at the observation deck to get it built properly.

### **Excellence in Project Execution and Management/Team Approach:**

GE Johnson maintained close coordination with CSNA Architects and the design-build consultants throughout the project. To design, permit, and build efficiently, the team went through an RFP process with mechanical, electrical, and plumbing subcontractors for efficient procurement and construction implementation for the difficult schedule. These services were procured from our trusted trade partners: IMEG Corp, Encore Electric, Encore TS, and Apollo Mechanical.

An open design format was used to search out any optional design ideas. The team went to great lengths in value engineering of specialty systems such as custom glass rail systems, copper roofing details, elevator reconfiguration, wine cellar furnishings, and other luxury finishes. Leveraging relationships was essential to procure limited, local materials in a timely manner. Working with high-end finishes also required a keen eye for installation and protection throughout construction and FFE operations.

### **Construction Innovations/State-of-the-Art Advancement:**

GE Johnson engages with projects during design, knowing it is the ideal opportunity to impact cost and provide a better product for the owner. Our virtual design and coordination (VDC) department provides a building systems coordination service, traditionally after construction documents are issued. For Castle Pines Golf Club, our VDC department sourced full mechanical, electrical, plumbing, and firefighting modeling for construction installations, providing clash detection, lift drawings for the complex wine cave and tower foundation systems, and integrated work plans. This eliminated the need for two sets of documents to provide confidence that the CDs reflected the work to be put in place.

To limit the exposure of elevated work, prefabrication of the structural canopy system was completed for installation on the observation tower. The structural steel erection, roof sheeting, and copper roof installation took place on the ground and was then flown to the tower fully fabricated.

### **Environmental/Safety:**

The GE Johnson safety culture involved site-specific safety orientations for everyone on the job. Initiatives included dynamic stretch and flex each day, the My Top 5 program, and a hazard recognition program.

Every workday was kicked off with a dynamic stretch and flex program to increase muscle mobility. Performing dynamic stretches prior to physical activity serves as a full-body warm-up and engages muscles to function safely. All team members, including all subcontractors, participated.

The My Top 5 program was started with the use of My Top 5: notebooks that are given to all team members. At the start of each workday, employees took the time to identify five safety concerns they had and what could be done to mitigate hazards. The team members discussed these and created pre-task plans to incorporate hazard-mitigating strategies prior to beginning any work so it was performed safely.

Finally, the hazard recognition program was used extensively for all trades at the project. Implementation of the program required training of employees and subcontractors on hazard

recognition, the identification of potential hazards on the jobsite, and an established method for project teams and craft workers to correct and report hazards or recognize when workers went the extra mile to ensure safety. This program engaged all team members to keep an eye out on how to correct unsafe or potentially unsafe activities, and to recognize when things were being done correctly.

Our only recordable incident occurred when one employee was stripping a suspended concrete deck and experienced a back strain. This resulted in two days restricted duty with more than 51,000 total hours worked.

### **Excellence in Client Service and/or Contribution to Community:**

GE Johnson's mission is to enrich our communities by leading and building projects with the best people and ideas. We seek opportunities to give back to every single community we have the honor to build in. The project team held up this mission by hosting a job site food drive and encouraging subcontractors to participate. The drive benefited the Food Bank of the Rockies, providing food to those in need across Northern Colorado and Wyoming. Collectively with other GE Johnson job sites and offices, 108,000 pounds of food was collected.

Quality projects are only accomplished by a collaborative team and strong relationships, two of our core values at GE Johnson. Working with trusted subcontractors and architects are paramount to a successful project. CSNA Architects has practiced in the Pikes Peak region of Colorado for over forty years and was one of our crucial partners for this project. We are proud of the relationship we have built with their team and their recognition of our work on Castle Pines Golf Club exhibits how we provide excellence in client service. Gregory M. Friesen, principal architect at CSNA Architects, stated, "Castle Pines Golf Club is one of the nation's finest. This project required achievement of nothing less than excellence. The path toward it had twists and turns and at every step the meaning of excellence became more clear and often more difficult to achieve. This required the project team to be nimble, quick to adapt, and steadfastly focused on delivering a superior product. The construction professionals at GE Johnson championed all challenges with grace and ease, and delivered for Castle Pines Golf Club a project of impressive quality worthy of the Club's national stature: GE Johnson excelled!"









