**Golf Practice Facility**

**Project Description**
Provide a new Golf Practice Facility with driving bays, putting and chipping, offices, locker rooms, lounge study and conference room areas.

**Energy Efficiency Measures**
This project is designed to surpass code required energy efficiency (ASHRAE 90.1 2007) by 30%. Some of the examples of the energy conservation measures include:

- Maximum insulation in foundation walls, exterior walls, and roof assemblies
- Energy efficient windows/glazing for increased thermal performance
- Daylighting controls for perimeter spaces
- Reduction of lighting levels through use of occupancy sensors
- Efficient mechanical heating/cooling systems. Geothermal wells and heat pumps are used to provide heating and cooling for 4000 square feet of the new golf practice facility. There are seven 300 feet deep wells that serve six heat pumps supplying conditioned air to several zones in the office areas. The geothermal field effectively and efficiently transfers the heat loss and gain from the building to an almost constant ground temperature source through a series of wells. The approximate energy savings is estimated to be 30% with an approximate payback period of 3-4 years.
- Domestic hot water reduction by using low flow fixtures
- Free cooling achieved by providing operable windows in regularly occupied areas.

**Other Sustainability Features**
The design team calculates that this project will qualify for LEED Gold-level Certification, if ASHRAE +30 is also achieved. However, the decision to apply for formal certification has not yet been made. Examples of some of the additional sustainability measures incorporated into the project include:

- The Golf Practice Facility is situated on a previously developed site instead of a new site and has no threatened or endangered plants or animal species that inhabit this space
- New building is sited on public bus routes, encouraging use of public transit
- Bike racks and shower facilities are provided, encouraging alternative transportation
- Existing parking provided on the site modified but not increased
- Storm water management incorporates a bioswale that will significantly reduce the quantity of storm water, as well as addressing storm water quality
- High SRI roofing material to reduce heat island effect
- All plumbing fixtures within the building will be low-flow fixtures and dual flush toilets
- At least 50% of construction waste will be diverted from disposal
- Regional /recycled-content materials are used wherever possible, as well as certified wood
Golf Practice Facility

- Use of low-VOC materials (carpets, paints)
- Use of grating mats and exhaust systems with filters to improve indoor chemical and pollutant source control

Project Data

- Budget: $2.5 M
- Schedule: Completion Scheduled for Summer 2011
- Square Feet: 10,000 gross sq. ft.

Substantially Complete: September 2011

- Project Status: Substantial Completion
- Design Complete: 100%
- Construction Complete: 100%