

## LEED Background for Borden Park and Castle Downs Park Pavilions

Based on the current designs for the Borden Park and Castle Downs Park Pavilions, it is projected that these projects will achieve approximately 46 LEED points each. Assuming all these points are achieved, the projects will only meet the LEED Certified level, which is between 40 – 49 points. In order to achieve the LEED Silver level, the projects need to achieve between 50-59 points.

In order to meet the lower range of the LEED Silver level, the design team determined that 5 additional points could be achieved within the design intent but at additional cost to the project. The additional points could result from enhanced commissioning (2 points) and measurement and verification (3 points).

Enhanced commissioning requires hiring a third party commissioning agent, an independent LEED consultant, hired to monitor and verify that the projects energy related systems are installed and calibrated to perform according to the project requirements and design intent at a significant cost. Measurement and Verification requires the installation of metering equipment to track the building's energy use which could add up \$50,000 in additional costs. The additional cost required to accomplish these LEED requirements are not accounted for in the current budget.

In larger, more complex buildings, enhanced commissioning and measurement and verification systems are beneficial and can offer savings from the building's operational perspective over the life of the building. However, on smaller, less complex projects like the Borden Park and Castle Downs Pavilions, these systems bring significant initial costs in the construction of the building and the investment will most likely never be recovered over the lifecycle of the building.

Specific to the Castle Downs Park project, there will be no full time occupants in the building and the majority of the building will be dedicated storage. An unoccupied building has a disadvantage when trying to obtain LEED designation because many of the points relating to indoor environmental quality and occupant comfort level cannot be achieved. In addition, this building has three separate modules that do not all require the same mechanical systems. The mechanical systems for the washroom module would have the same in-floor heating and heat recovery ventilation regardless of LEED certification. If LEED certification is pursued, the storage modules will be required to have the same expensive heating and mechanical systems as the washroom building. If LEED certification is not pursued, the storage modules will have a less expensive and less complex mechanical system and will only require minimal ventilation requirements and comfort levels since the space would be unoccupied.

By not pursuing LEED Certification or LEED Silver, administration fees relating to LEED would not be incurred. Such administration fees would include LEED consulting fees, LEED registration and additional time and charges for the

Contractor to compile the required LEED documentation. Cost for these services range between \$125,000 to \$150,000 per building. The performance and sustainable elements of the building will not be sacrificed by not pursuing LEED Certification, and the design will maintain the original sustainable elements as indicated in Attachment 2, only without the additional administration and unwarranted, expensive mechanical systems.