

## How is the environment being considered in the planning and construction of Crossroads Public School?

Some of the Environmental Features/Considerations at Crossroads Public School are:

- ✓ Solar Panel Project
- ✓ the school's temperature controls and after hour lighting are controlled by a Building Automated System to minimize energy use,
- ✓ classrooms lights are controlled so that on sunny days lights near the windows can be turned off,
- ✓ boy's washrooms have urinal flushing controller by occupancy sensors,
- ✓ all lighting is energy efficient and has been designed to minimizing the number of fixtures without compromising lighting quality
- ✓ a water fountain with a bottle filling feature will be installed to try and reduce/eliminate the use of plastic water bottles in the school
- ✓ paint used will be zero VOC
- ✓ the use of carpet has been minimized, and where it exists it will be low VOC
- ✓ the gym floor will be hardwood ( natural product ) rather than a synthetic product
- ✓ there is a storm water detention area on the site which serves to prevent large volumes of water from entering the storm sewer system therefore reducing flooding. Water detained, also absorbs into the soil below, thereby reducing the overall amount of runoff into the town's storm sewer system and ultimately reducing the amount of water that flows back into the lake,
- ✓ the building is insulated using 3 inches of sprayed foam insulation. The foam insulation has a higher R value per inch than typical fiberglass insulation, it is water repellent and also forms a homogenous blanket around the entire building,
- ✓ windows are thermally broken aluminum frames with hermetically sealed(insulated) glazing. The window also have a low E coating on them that keeps the radiant heat on the same side of the glass from which it originated, while letting visible light pass. This results in more efficient windows because radiant heat originating from indoors in winter is reflected back inside, while infrared heat radiation from the sun during summer is reflected away, keeping it cooler inside,
- ✓ the landscaping that has been designed for the site uses environmentally sensitive principals such as drought tolerant species, plants tolerant to excessive exposure conditions such as extreme heat and extreme cold. As much as possible, native species were specified. Deciduous trees are planted in front of the library to further reduce overheating during the summer months, and since these trees lose their leaves in the winter, they will allow the winter sun to penetrate.
- ✓ the ground floor corridor is finished with Terrazzo which has negligible environmental impacts respective to maintenance requirements and related materials,
- ✓ and more!