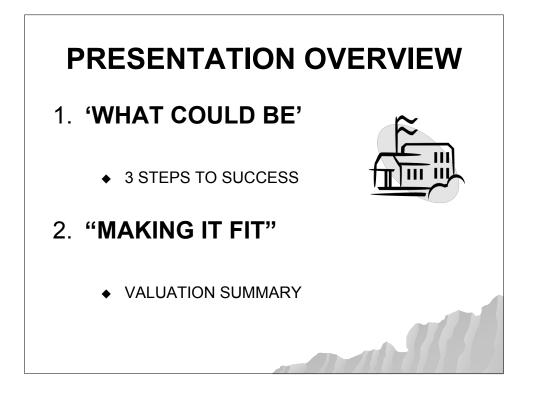
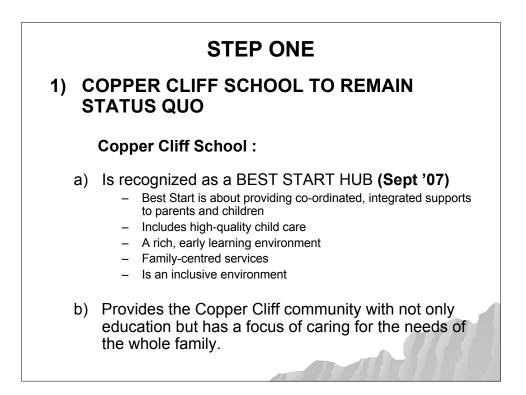
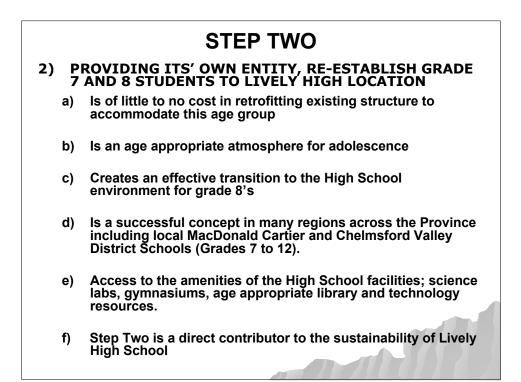
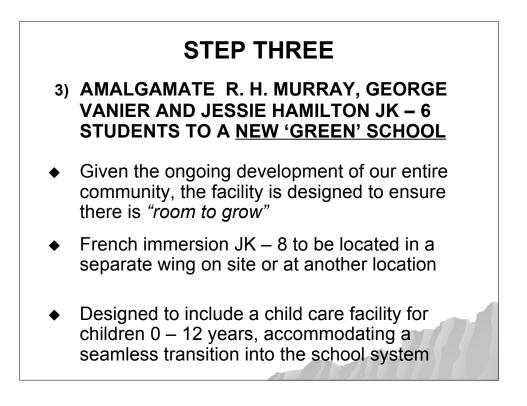


"Change has a considerable psychological impact on the human mind. To the fearful it is threatening because it means that things may get worse. To the hopeful it is encouraging because things may get better. To the confident it is inspiring because the challenge exists to make things



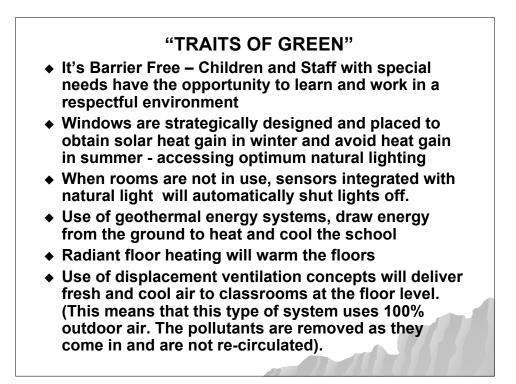






### So What's a "GREEN" School?

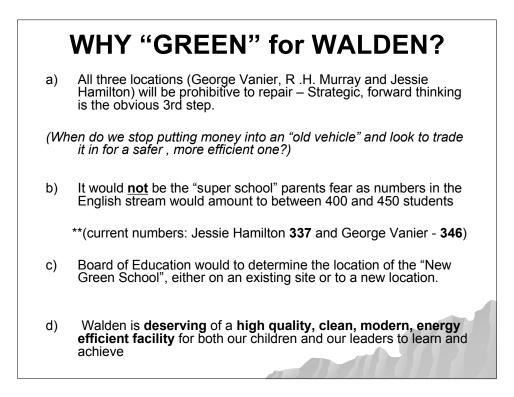
The Rainbow District School Board knows about creating a superior learning environment and an efficient, durable facility. They rebuilt the Valley View Public School which is slated to open in September 2007. This new school will incorporate Go Green environmental certification principles, focusing on the awareness of waste management, building materials, the interior environment and the needs of its users. This \$15 million dollar construction project is the <u>first</u> new school the Rainbow Board has built in 40 years and one of the first of its kind to be built in Ontario.

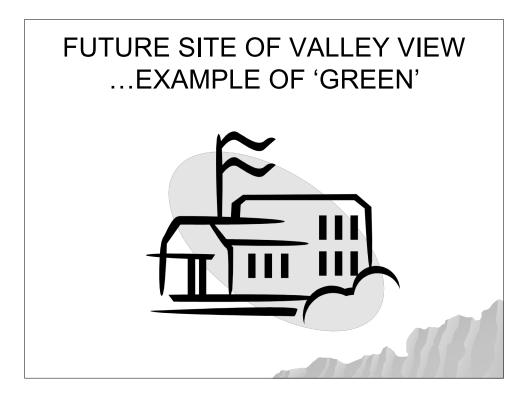


### **"TRAITS OF GREEN"**

- Waterless urinals and low flush toilets. The water reuse system saves water and teaches students the value of conservation.
- At Valley View School, they used building products with recycled content. The school used wood beams from the existing school for interior benches. This added greatly to the architectural features. As well, the concrete floors contain recycled glass collected by the students themselves.
- The Green School houses a waste management program, diverting waste products to our recycling facilities.
- The incorporation of Smart IT systems make use of state-of-the-art technology.
- Good Acoustics, lighting, thermal comfort and air quality reduces operating expenses, protects the natural environment and improves the health and productivity of students and staff, while reducing energy consumption.





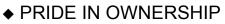




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# **OUR COMMUNITY VALUES...**

- A state of the art, barrier free facility for expanded community use.
- Child care is "one stop shopping" safe and secure
- The health and wellness of staff and students
- ◆ The maintenance of our high school
- The ability to continue to provide home buyers a reason to raise families in our community

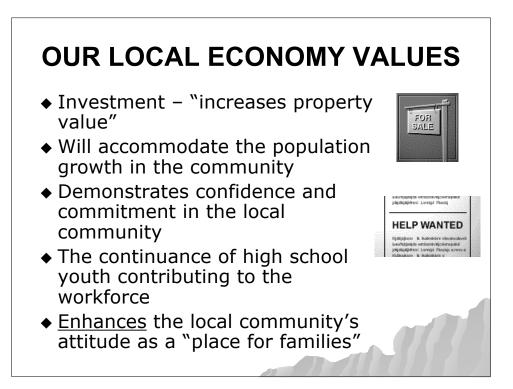


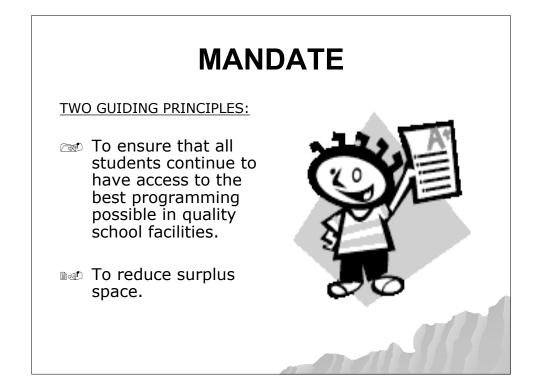


## **OUR SCHOOL BOARD VALUES**

- "Bragging rights" for green school continuance in a sustainable, energy efficient facility
- Response to issue of surplus space and access to the best programming possible in a quality school facility.
- Response to enrolment pressures
- Response to Community Needs (Need for the High School, Need to not create a 'super school')
- Redirect savings to other priorities









# Rainbow District School Board develops green school

hen the new Valley View Public School opens in September, it will mark a historic occasion. Greater Sudbury will be home to one of the first green schools in Ontario.

"This is Rainbow District School Board's first new school in 40 years and, we are proud to say, it will be a model for sustainable development as a high performance green school," said board chair Dena Morrison. "We focused the efforts of the design team on sustainable project ideas. We wanted to create a superior learning environment and an efficient, durable facility."

The new school will incor-

porate national Go Green environmental certification principles, which take into account industry "best practices," including resource consumption, waste management, building materials, interior environment and occupant awareness.

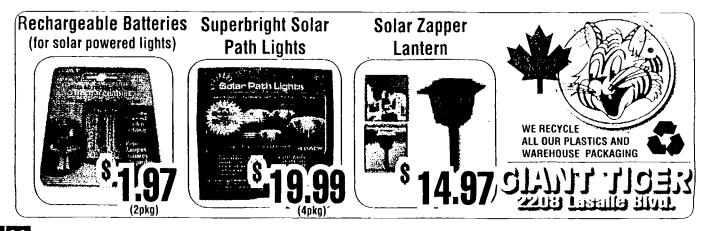
Currently being built on the existing site of Valley View Public School, the new school will house JK to Grade 1 students from Val Caron Public School and Grade 2 to 8 students from Valley View Public School. The school will open in September with a projected enrolment of 500 students in the French Immersion program.

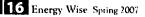
The new school will be barricr-free and have space for lower class sizes in the primary grades, as well as physical education, instrumental music, visual arts, computer technology, a library and special education. There will also be space for a beforeand after-school program and a full daycare in response to commúnity needs.

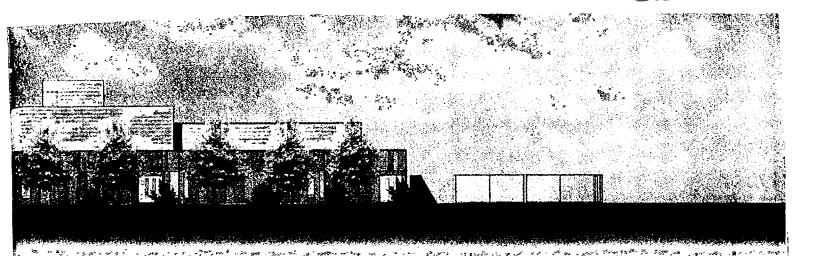
A number of sustainable design features are being included in the New Valley View Public School. Good acoustics, lighting, thermal comfort and air quality in the 65,000 square foot facility will reduce operating expenses, protect the natural environment and improve the health and productivity of students and staff, while reducing energy consumption. "The school will serve as a teaching tool, demonstrating to students and the community that addressing environmental issues means creating a healthier, more efficient learning environment," said Morrison.

A number of sustainable design features have been included in the building, making it a flagship school for environmental efficiency and stewardship. The architect and sustainable consultant designed the building with a north/south orientation, maximizing windows on the north and south faces of the building. Sun screening devices and glass

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### continued from page 16

are used to optimize the amount of natural light in the school, obtain solar heat gain in the winter and avoid undesirable solar heat gain in the summer.

This approach has many benefits. It provides a learning environment lit with natural light, reduces the need for artificial lighting, takes advantage of passive solar heating during the winter months and shades the hot sun of the summer. When rooms are not in use, occupancy sensors integrated with the artificial lighting systems will automatically shut lights off. This type of lighting/daylighting will result in significant energy savings.

The use of geothermal energy systems in the new school provides four units of energy from the ground for every unit of energy purchased from conventional sources. This efficiency is unequalled by other conventional heating and cooling systems. Geothermal systems heat and cool the school by tapping into the relatively constant temperature of the earth below the frost line, at significant energy savings.

Heating will be delivered to classrooms using radiant floor heating systems. Cooled/tempered air will be delivered to classrooms using displacement ventilation concepts. Displacement ventilation will deliver fresh and tempered (cool) air to classrooms at floor level. Displacement ventilation systems typically use 100 percent outdoor air. As a result, air pollutants generated within the building are removed at source and are not recirculated. The displacement ventilation system will improve the indoor environment.

A water reuse system will conserve water use and demonstrate sustainability to students. A wetland biofilter will remediate sanitary waste from waterless urinals and low volume flush toilets and divert approximately 70 per cent of the remediated water to recirculate in toilets throughout the school.

Washroom fixtures will use minimal water. The wetland biofilter, a series of filters and planting beds, will illustrate natural process remediating methodologies. And, conventional field beds on the site will be used to dispose of excess greywater. The school will not be connected to the municipal sanitary system. The water reuse system will save water and teach students the value of water conservation.

A number of additional sustainable features are being incorporated into the building, including the use of building products with recycled content. For instance, the school will have retroplated concrete floors with recycled glass chips collected by the students. Wood beams from the existing school will be reused as interior benches *f* architectural accent features.

The school will also have a waste man-

agement program that documents diversion of waste products from the construction to recycling facilities in the Greater City of Greater Sudbury.

The building will also incorporate Smart IT systems, making use of state-of-the-art technology.

Ameresco Canada is overseeing this \$15 million construction project on behalf of the Board.

- The project team includes:
- Architect
  Castellan James + Partners
  Architects Inc.
- Sustainable Advisor Tom Tamblyn - Dearness Conservation Society
- Mechanical/Electrical Engineer
  LKM SNC Lavalin
- Wetland System Engineer Ecoworks Technologies Inc.
- Civil Engineer
  Northland Engineering (1987) Limited
- Structural Engineer Halsall Associates Limited
- Landscape Consulting Bill Fryer Landscape Architect
- Contractor

Ameresco Canada Inc.

For more information about the New Valley View Public School and Rainbow District School Board's Go Green initiatives, log on to rainbowschools.ca.

