ABOUT VALE BASE METALS TECHNOLOGY DEVELOPMENT

Much of Vale’s nickel technology has been developed by Vale Base Metals Technology Development at its two research and technology facilities in Mississauga, Ontario. The original laboratory, constructed in 1965 and expanded substantially in 1990, includes over 40,000 square feet of laboratory and mini-plant space as well as service and office areas. An additional building spanning 36,000 square feet was purchased in 2002 to house the Voisey’s Bay mini-plant.

The Vale Base Metals Technology Development group comprises of six disciplines: Mineral Processing, Pyrometallurgy, Hydrometallurgy, Carbonyl Technology, Product Applications and Process Engineering. In addition a cross-functional group, Research Services, supports the research needs of all these disciplines. Included in the Research Services group are Analytical Services, Information Services, Electrical Services, Purchasing, Occupational Health & Safety and Maintenance.

LOCATION

ADDRESS: 2060 Flavelle Blvd, Mississauga, ON
WEBSITE: www.nickel.vale.com

LOW-IMPACT SITE DEVELOPMENT – LANDSCAPE NATURALIZATION

BRINGING THE WILD BACK TO THE OFFICE

Vale Base Metals Technology Development in the Sheridan Research Park in Mississauga is a 10 acre site, 6 acres of which was comprised of planted trees and manicured grass. As part of its ongoing commitment to sustainability, Vale wanted to reduce its facility’s environmental impact by naturalizing the turf areas to increase local biodiversity and reduce turf maintenance inputs i.e. pesticides, irrigation and fossil fuels.
“Employees at Vale were interested in doing what they could locally for the environment,” said Jenn Bergsma, Vale’s Project Coordinator, “naturalizing some of the grassed areas around our facility not only made sense from an environmental standpoint, but also reduced our maintenance costs.”

The naturalization project addressed over half of the grass areas by planting a mixture of native trees, shrubs and wildflowers in natural groupings, and the turf was allowed to grow. Walking trails were cut through the naturalized area to provide an opportunity for employees to enjoy the space during their breaks and witness the transformation of the space.

“The site was carefully designed from ecological and aesthetic points of view. The trees and shrubs were planted in long, irregular clusters to create movement throughout the site and species were chosen for their winter interest and hardiness i.e. White Pine, Red Cedar, White Birch, Red Osier Dogwood and Staghorn Sumac among others,” explained Paul O’Hara of Blue Oak Native Landscapes, who was hired to design, implement and maintain the naturalization project. “Furthermore, the naturalized area was kept within a widely mown frame and away from the building envelope to ensure it looked tidy and purposeful, not overly wild and neglected.”

“The importance of the naturalized area to local wildlife cannot be overstated,” shared Mr. O’Hara, “within the first year insect activity exploded, birds have returned, as have rabbits, groundhogs, and even hunting foxes and raptors.”

Blue Oak Native Landscapes has been retained to do ongoing monitoring and maintenance like watering the trees and shrubs to get them established, culling out invasive species like Buckthorn, White Mulberry and Canada Thistle, and enhancing the meadow areas with further wildflower plantings. In the meantime, maintenance costs have continued to decrease as mowing costs have been cut in half and irrigation has been reduced by more than 75%.

“Overall, Vale has found the naturalization project to be a positive step for the company and our employees,” continues Jenn Bergsma. “It has brought a new dynamic to our site – not only does it look great, but it highlights the company’s commitment to improving our local environment.”

For more information on how to naturalize your site, contact:

Paul O’Hara
Blue Oak Native Landscapes
www.blueoak.ca

Greening Corporate Grounds –
Credit Valley Conservation Authority
Toronto and Region Conservation Authority
Before planting. An expanse of neatly mown turf. Photo courtesy of Paul O'Hara, Blue Oak Native Landscapes

September 2009. Four months after planting the trees and shrubs and letting the turf grow. The stakes indicate the widely mown pathway through the naturalized turf. Photo courtesy of Paul O'Hara, Blue Oak Native Landscapes

September 2010. The shrubs and trees have taken hold. New England Aster and Heath Aster are in flower. The neatly mown pathway can be seen on the left. Photo courtesy of Paul O'Hara, Blue Oak Native Landscapes
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Through new forms of business-to-business collaboration, Partners in Project Green delivers programming that helps businesses reduce energy and resource costs, uncover new business opportunities, and address everyday operational challenges in a green and cost-effective manner.

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