



MAIN ENTRANCE AND ADMINISTRATION BUILDING



CITY OF VANCOUVER

City of Vancouver
National Works Yard
Vancouver, BC

CLIENT: City of Vancouver
CONSTRUCTION VALUE: \$22 million
COMPLETION DATE: March 2004

The new City of Vancouver National Works Yard is a 12-acre Engineering Operations Facility with a technically complex program including an Administration Centre, Garage/Radio Shop, Parking Operations, Warehouses, Car Wash and Fuelling Station.

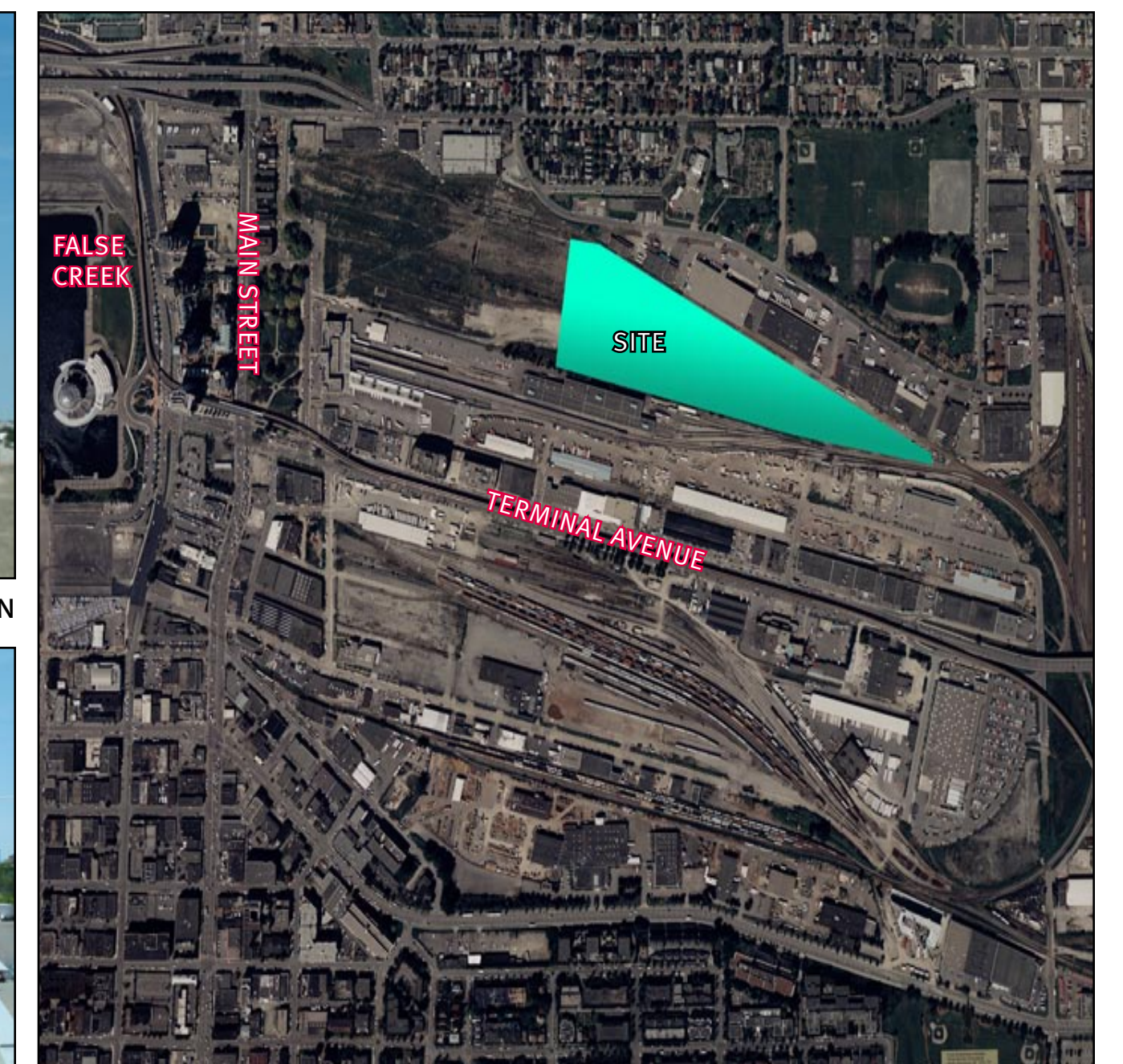
The project is the City of Vancouver's pilot initiative to promote sustainable design practices. The City's leadership and level of commitment to these sustainable principles is reflected in the design expertise employed and the application of sound environmental building practices, which culminated in the facility's Administration and Parking Operations buildings achieving **LEED™ Gold** - the first buildings in Canada to receive this level of certification from the Canada Green Building Council. The project is also a test case for various sustainable technologies and a showcase for the City's many "green" initiatives.

The Works Yard incorporates the operations of eight engineering branches, with associated support for the facility. Approximately 400 employees will be based out of the new yard, and it will have the capacity to accommodate growth of operations over the next 10 to 20 years.

Omicron provided architecture, engineering, project and construction management services to the City for this new \$22 million facility which is located on National Avenue in the False Creek flats industrial zone.



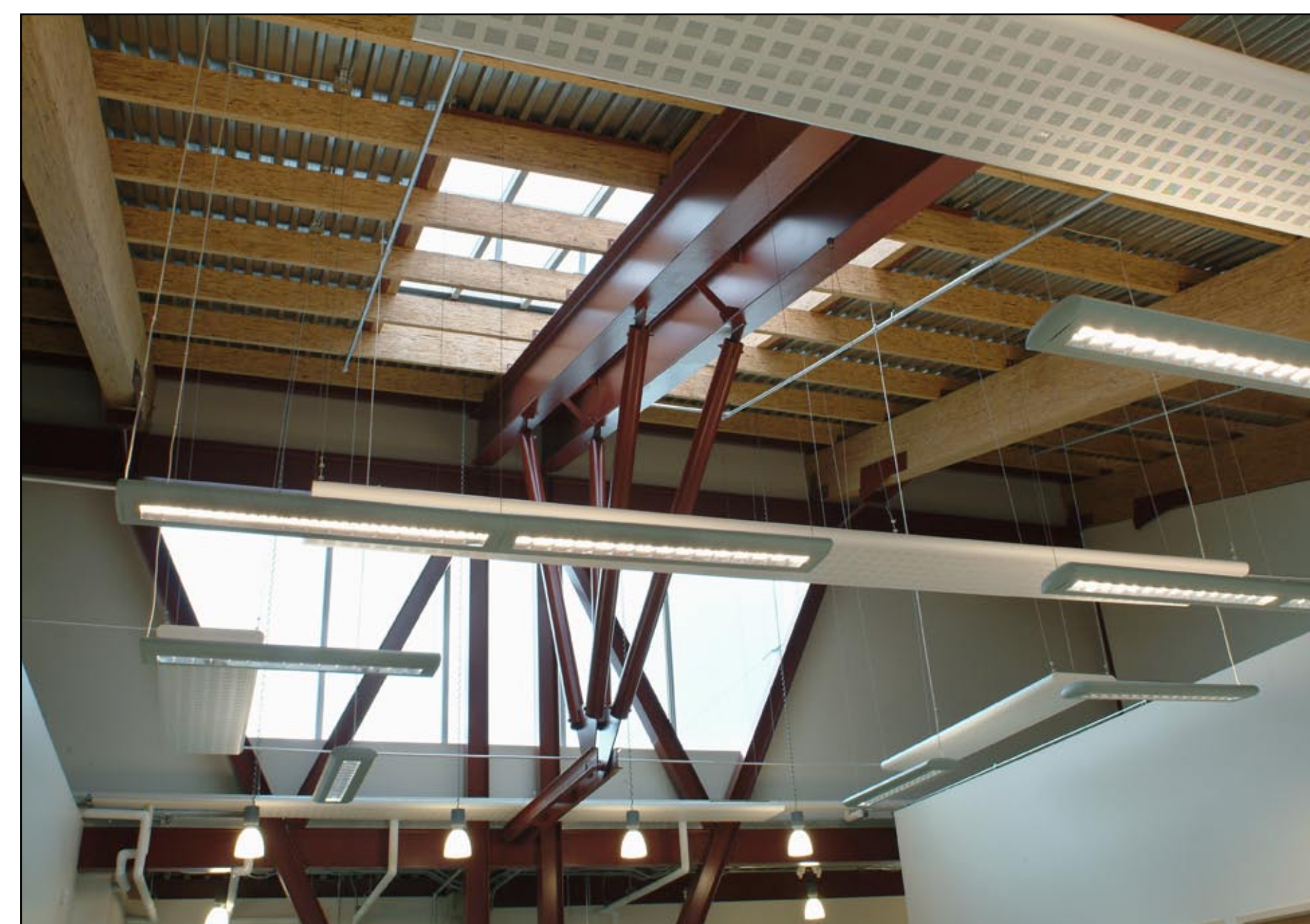
ADMINISTRATION BUILDING UNDER CONSTRUCTION



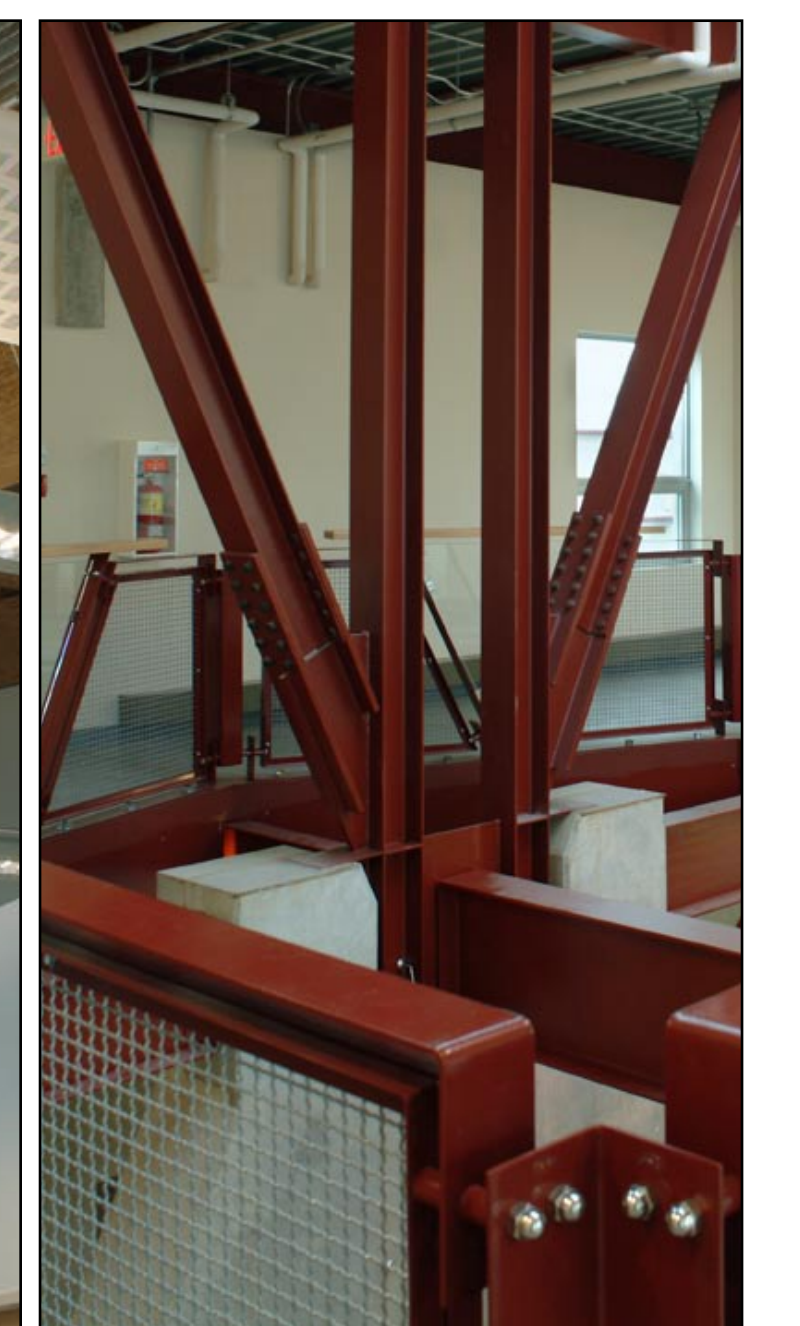
CONTEXT PLAN



GREEN VEGETATED ROOF ON ADMINISTRATION BUILDING



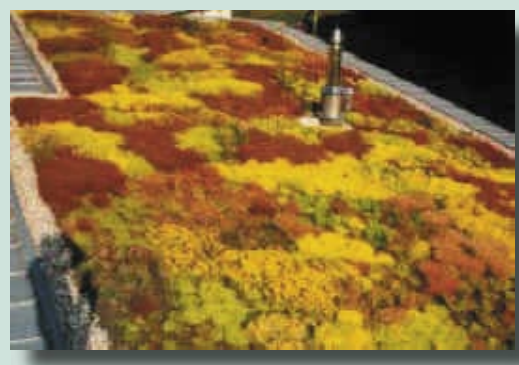
ADMINISTRATION BUILDING INTERIOR



Meeting LEED™ Criteria

City of Vancouver
National Works Yard

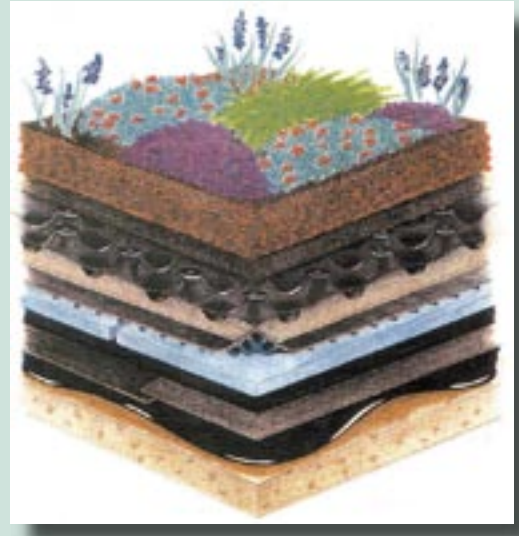
Sustainable Sites



Erosion & Sedimentation Control

Brownfield Redevelopment

- redevelopment of former rail yard



Alternative Transportation

- close to public transportation
- propane refuelling available
- bike storage and showers for occupants



Stormwater Management

Landscape & Exterior Design to Reduce Heat Islands

- green vegetated and reflective roofs



Light Pollution Reduction

- lighting designed for zero direct beam illumination leaving site

Water Efficiency



Water Efficient Landscaping

- drought resistant landscaping requires no irrigation



Innovative Wastewater Technologies & Water Use Reduction

- recycled rainwater used for flushing toilets, urinals and dual flush toilets reduce water use by 75%



Energy and Atmosphere

Optimize Energy Performance

- ground source heat pump & radiant heating cooling system reduces energy use by 60% over MNECB



Additional Commissioning

- an independent commissioning agent ensures building systems perform optimally



Renewable Energy

- photovoltaics provide a portion of the power to the building

Materials and Resources

Construction Waste Management

- over 75% of construction waste is recycled



Recycled Content

- over 30% recycled content in building materials



Local / Regional Materials

- over 50% of materials are obtained locally, reducing pollution from transport



Indoor Environmental Quality

CO2 Monitoring

- ventilation systems controlled by CO2 sensors



Increase Ventilation Effectiveness

- displacement ventilation system provides fresh air directly to occupants

Low-Emitting Materials

- low VOC materials improve indoor air quality

Controllability of Systems

- operable windows give occupants control of their indoor environment



Daylight & Views

- 90% of occupants have direct views to the outside