

University of Windsor Integrated Parking & Innovation Centre



Project Description

Newton Group was the Design-Builder on this project which contained a 40,000 square foot Innovation Centre and a 1,055 stall parking structure for the University of Windsor. The project was awarded on a predetermined, not to exceed budget. In addition to a cost-efficient design, the project had to contribute to a vibrant student environment, provide functional and contemporary amenities, enhance the University's role in the community, and support the campus master plan. Other important requirements were the ease and speed of implementation, long term sustainability and low running cost of the asset.

The project included building the two level Innovation Centre, including green roofs on the sloped wing verandas. The building accommodates ground floor space for offices, a financial institution, a café, courtyard, Parking Services and Campus Community Police. The second floor provides an Accelerator Centre for start-up companies providing offices, meeting rooms, and networking areas. A nine meter pedestrian bridge located on the second storey of the Innovation Centre connects to the parking structure across the landscaped courtyard. The building is climate controlled with a Variable Air Volume system utilizing a central steam system converted to hot water for energy efficient heating.

The parking structure, which was built using the CANADACAR Parking Structure Building System, incorporates three bays, each slightly sloped to eliminate the need for dedicated ramps making the building very efficient in both space and cost. Inside the structure there are 20 Electric Vehicle (EV) charging stations, 18 fully accessible spaces, and bicycle racks capable of storing 70 bicycles. Dr. Alan Wildeman, President and Vice-Chancellor of UWindsor commented, ***“One of the important safety features of the parking structure design is the use of wide open space; you can see from one end to the other without any columns.”***

Newton Group maneuvered several challenges on the project, including an altered foundation design to avoid an underground utility tunnel which ran diagonally across the entire site. Newton Group used strategically drilled caissons to span the foundations overtop of the underlying utilities. The compact site boundary required an efficient construction plan with the cranes erecting the full building height every three gridlines to limit the crane reach.

Included in the contract was site development, site servicing, relocation of main gas utility, demolition, a 700 m³ storm water retention cistern and water recycling system for landscape irrigation. All approvals were obtained from Windsor Building Department.



Project Details

Completion Date	Spring 2014
Contract Type	Design-Build
Owner	University of Windsor
Number of Spaces	1,055
Gross Floor Area	Garage: 295,000 sf Innovation Centre: 40,000 sf

Project Team

General Contractor	Newton Group Ltd.
Engineer	Tacoma Engineers Inc.
Architect	MMMC Inc. Architects


References

Owner:	Mr. Danny Castellan
Title:	Manager, Facility Planning, Renovation & Construction
Phone:	519-253-3000 x2164
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Awards

2014 Excellence in Hot-Dip Galvanizing Awards
-American Galvanizers Association (AGA)

Location

 638 Sunset Ave, Windsor, ON N9B 3B3



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