

HOWARD PRUDEN SERVICES

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To Whom It May Concern:

I am pleased to submit this written affirmation that the University of Alberta's Fire Pump Testing Water Recovery Program is a unique water conservation program and in my opinion meets the criteria for an Innovation Credit for the Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability Tracking, Assessment & Rating System (STARS) Assessment.

I am a 30 year veteran with the Edmonton Fire Rescue Services specializing in Fire Prevention, code interpretation and the Liaison between the Fire Department and the City of Edmonton Planning and Development Department. I was on the Edmonton Safe Housing Committee that addressed the use of modified building codes as a way to make substandard housing safe and healthy. I also was involved in the "Adjacent Property Protection" an Alberta Fire Code regulation that provided fire protection on newly constructed buildings to prevent multiple structure losses.

The Fire Pump testing water recovery is an unique and simple way of yearly diverting thousands of gallons of water from our sewer systems and reusing the water to irrigate vegetation and other uses on campus. This sustainability initiative is unique to the University of Alberta, while still complying with Fire Code regulations to flow test the fire pumps to 150% of the pumps rated output. Other institutions may try and reduce their water usage by minimizing the amount of flow and pressure requirements compromising testing standards while still dumping water down the sewer. Solidifying the University of Alberta's commitment to sustainability they have also installed a 25,000 Gallon underground water storage tank that provides storage for the recovery water until needed.

I argue that the University of Alberta's Fire Pump Water Recovery Program is a compelling project that meets the criteria set out by AASHE for a STARS innovation credit.

Sincerely,



Howard Pruden
Fire Safety Advisor



Stantec Consulting Ltd.
10160 - 112 Street, Edmonton AB T5K 2L6

July 15, 2014

Attention: Hugh Warren, Associate Vice-President

University of Alberta
Operations and Maintenance
Facilities and Operations
4th Floor General Services Building
Edmonton, AB T6G 2H1

Dear Sir,

Reference: University of Alberta Initiative for Water Recovery

In recent years, buildings design has made substantial strides in reducing water consumption in buildings. Some of these initiatives include low flow fixtures, waterless urinals, landscaping that utilizes planting that does not require substantial watering; grey water system recovery, and rain water system recoveries.

The use of grey water systems and rain water systems require varying degrees of cisterns, filtering and chemical treatment before reuse, which involves maintenance personnel, power consumption, and capital cost.

The U of A has undertaken an initiative to recover water from fire pump tests, which must be done annually for each building. Considering that pumps will deliver up to 1500 gallons per minute, and the test will run for approximately 5 minutes, and considering the number of buildings on the university campus with fire pumps, a considerable amount of water is available for recovery.

The use of the recovered water results in avoidance of water consumption for landscaping that would otherwise be serviced from the municipal supply. The value of this initiative for recovery is especially enhanced since the recovered water requires no capital cost associated with the building, and no water treatment/power/maintenance cost is incurred.

Hats off to the U of A for a very cost effective, energy efficient recovery system.

Regards,

STANTEC CONSULTING LTD.

A handwritten signature in black ink, appearing to read "Bob Campbell", written over the printed name.

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