

Assignment Name: East Bowmont Stormwater Quality Retrofit (SWQR)		ID#: 9
Country: Canada Location within Country: Alberta	Approx. value of the contract: US\$ 4.0-million.	
Name of Client: City of Calgary (Water Department).	Approx. value of the professional services provided under the contract: US\$ 750,000.	
Address:	Total No. of staff-assigned to Project: 4	
Start date (month/year): April 2013	Total No. of staff-months of the assignment: 10	
Completion date (month/year): December 2014	Duration of assignment (months): 21	
<u>Narrative description of Project:</u> Design and construction supervision for a stormwater management and water quality improvement project, integrated with a natural parkland / wetland configuration utilising new water treatment technologies, capable of attenuating and treating a maximum flow rate of 50 m ³ /s.		
<u>Description of actual services provided by professional engineering staff within assignment:</u> Project Manager and Design lead for a stormwater collection and low-flow diversion structure, where the low flows (up to a maximum of 50 m ³ /s) were diverted to a sediment removal structure. The outlet of the sediment removal structure fed a manufactured wetland where varying depths, flow velocities and vegetation types existed to manage the flow and provide a measure of natural treatment to the stormwater prior to discharge to the Bow River. The high-flow bypass structures and pipeline were designed to connect to an existing outfall structure, thereby mitigating the need for an environmental application for a new outfall. Flows higher than the design maximum of the outfall structure was diverted to a manufactured flood attenuation area, with the excessive flows discharging via a pre-existing natural stream location. Preparation of a procurement package including tender drawings, technical and commercial specifications and schedule of quantities.		
<u>Description of Activities provided by RWI</u> Project Manager and design integration lead, managing the interface between stormwater, structural design of diversion structures and the specialist landscape and sediment management sub-consultant responsible for the design of the sediment removal structure and the manufactured wetland and flood attenuation parkland area. The sediment removal structure was a proprietary design using circular geometry and variable velocities to settle out varying particle sizes prior to a variable outlet structure in the centre of the sediment removal structure. The hydraulics of the wetland was site-specific and required extended QA to ensure viability in normal operations. A significant effort was required for the integration management between environmental agencies, City Parks, specialist sub-consultant and City managers. Provided project oversight of the procurement package to the project engineers; client management and management of various claim and scope variation submissions.		

