

Assignment Name: Bonnybrook WwTW - Treated Effluent Water (TEW) distribution system		ID#: 8
Country: Canada Location within Country: Alberta	Approx. value of the contract: US\$ 1 million.	
Name of Client: City of Calgary (Water Department)	your firm under the contract: US\$ 300,000.	
Address:	Total No. of staff assigned to the project: 8	
Start date (month/year): 01-01-2013	Total No. of staff months: 16	
End date (month/year): 15-07-2014	Duration of assignment (months): 42	
<u>Narrative description of Project:</u> Design and Construction supervision for a treated effluent water supply system (TEW) for reuse in plant operations; including final design of the pipeline and pump station interface (pump station by others).		
<u>Description of actual services provided by professional engineering staff within assignment:</u> Project Manager and Process Design lead for a treated effluent water supply system (TEW) for reuse in the plant; including final design of the pipeline and pump station interface (pump station by others); pipeline routing through underground utility tunnels using C3D planning. Project scope included the preliminary and detailed design of pipeline and connection systems to the tunnel walls / roof. Congested tunnel space required significant site modifications to the preliminary design drawings. C3D and 3D technology solutions assisted with clash detection. Preliminary and detailed design of pump station including pump selection and layout of the intake / discharge piping and controls. External pipeline route selection required allowance for future treatment tanks (buried circular treatment units) with structure bury depth greater than the pipeline inverts. Space was limited and allowance was to be made for possible future construction techniques in the design of the pipeline locations. The Tender Package included a Design Report, Tender drawings and Contract document and construction monitoring.		
<u>Description of Activities provided by RWI</u> Project manager for the design of the pump station upgrade. Technical responsibility for the TEW pipeline size and routing, pump selection and pipe configuration inside pump station. Technical lead for design integration between the pipeline and pump / pump station design consultants. Client decision to split responsibility required additional care to ensure a correct technical handshake between design entities. Co-ordinated the preparation and finalization of the procurement package.		

