

DAWSON'S LANDING POND 28 STORM PARK

QUALICO[®] COMMUNITIES (2020 - PRESENT)

CHESTERMERE, AB

"Dawson's Landing Pond 2B is an interesting evolution of our stormwater management innovation. Within the 2B system, we've upcycled a water treatment residual waste product and introduced it within the biofilter to enhance the phosphorous removal potential. We've learned that a waste product in the water treatment process is a hugely beneficial asset to the stormwater management treatment process."

Sahil Sharma, Stormwater Engineering Lead, MAGNA ENGINEERING SERVICES INC.

PROJECT CONTEXT

Dawson's Landing Pond 2B represents a seamless extension of the ongoing Qualico[®] Communities development at Dawson's Landing in West Chestermere. It functions as a crucial stormwater management facility, catering to a significant portion of the community's direct drainage area. Like its precursor, Dawson's Landing Pond 2A, which embodies the original Source2Source Stormwater Kidney[®], MAGNA, in collaboration with Source2Source, undertook the task of conceptualizing a second Storm Park known as Pond 2B. This initiative was driven by a recognition of numerous distinct prospects to employ innovative methodologies.

MAGNA'S SOLUTION

Storm Park Pond 2B facility is a leading demonstration of wetland feedwater practices to sustain existing ecosystems. This system serves to provide supplementary stormwater to the neighbouring Dawson's Landing Eco Park, which is a large retained natural wetland. Pond 2B offers feed water to the Eco Park by dynamic hydro-period mirroring which seeks to offer the wetland a similar hydrological experience in post-development conditions. The increased water quality achieved through the 2B system allows for more reliable feedwater to the wetland which ultimately sustains stronger wetland habitats and continues to build system resiliency.

COMMUNITY OUTCOME

The Storm Park has consistently remained a trailblazer in discussions regarding water reuse in Alberta. The strategic focus on watershed management and volume control practices has effectively expanded the range of options for reuse. By facilitating access to dependable, premium water sources, these efforts empower communities to tackle forthcoming climate challenges. Additionally, they offer chances to exhibit urban resiliency.

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