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NUNAVUT **I**MPACT **R**EVIEW **B**OARD **NUNAVUMI AVATILIKIYIN KATIMAYIN**

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3AM-ARV1016 Water Reservoir Cell #3

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Period of operation:	from 2017-05-15 to 2038-05-17
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ᐃᑦᑲᑦᑲᑦᑲᑦ:	Megan Lusty CN-CGS P.O. Box 490 Rankin Inlet Nunavut X0C0G0 Canada ᐃᑦᑲᑦᑲᑦ: 867-645-8176, ᐃᑦᑲᑦᑲᑦ: 867-645-8141

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ᐃᑦᑲᑦᑲᑦᑲᑦ: Department of Community and Government Services (CGS), Government of Nunavut (GN) retained exp Services Inc. (exp) to prepare the detailed design for the new water treatment facility and an expansion of the community raw water storage. The scope of the exp assignment includes preparation of the schematic design, design development, preparation of detailed construction drawings and preparation of construction documents such as specifications. Early in this design assignment, representatives of CGS and exp met with the Hamlet Council. Several issues were raised by members of Council. • Safe manoeuvring of trucks at the truck-fill facility was viewed to be an important safety concern, both for water truck drivers and community members. • Appropriate arrangements at the truck loading arm to minimize spilled water and the resulting ice accumulation was considered important. • Measures to minimize the impacts of snow-drifting were viewed to be important. The water treatment plant facility will include two pump houses, the reconditioned pump house which will supply water from the existing reservoirs #1 and #2, and a new pump house supplying water from the new reservoir. The facility will also include a treated water storage tank to provide chlorine contact time for disinfection and process wastewater storage tank to collect waste water from the treatment process (backwashing of the filters). The wastewater storage tank will require to be emptied by the Hamlet's sewer trucks. The water treatment plant will have a dual truck fill arm for simultaneous filling of water trucks. The fill rate for the water trucks will result in the trucks being filled in approximately 13 minutes The water treatment processes that have been incorporated into the design include the following. • Self Cleaning Strainers This step will remove large colloidal contaminants such as dust and larger debris (grass, sand and weed growth). This step makes the next stage (pressure media filters) last longer and be protected from large items that may be picked up by the pumps. • Pressure media filtration This is the main filtering stage that filters down to 5 microns

Project Map



