



Wastewater Collection System

THE NEW WASTEWATER COLLECTION SYSTEM represents an important step forward in municipal infrastructure for the residents of Sunbreaker Cove, and will enable our wastewater to be transported in pipelines through an expanded regional system to be treated at the Red Deer Wastewater Treatment Facility.

The design of our system reflects learnings obtained from other municipalities to ensure construction and operating costs are minimized, and that the system will be reliable and capable of handling the needs of our residents. The collection system will be placed at sufficient depth to avoid freezing primarily via directional drilling and using excavation pits to make necessary connections within the system.

Our municipal system includes three main components:

- 1 Sewer main lines running along side or under the roads in front of our property. These will be flexible plastic pipes (HDPE DR11) with sections having outside diameters between 2 and 6". Provisions will be included so they can be flushed to remove any blockage that may accumulate.
- 2 The portion of the service connection to the sewer main line which is located on municipal property. This will consist primarily of a service stub (1.5" OD HDPE DR11 pipe) and include an isolation valve (curb stop).
- 3 The portion of the service connection located on individual properties, as well as the owner's grinder pump and tank. Information about this private portion of the system is discussed later within this document.

Our construction project will be occurring in tandem with the regional system's expansion. Their expansion project involves constructing:

- 1 a 550 m pipeline from our municipal boundary to the Blissful Beach Lift Station,
- 2 the Blissful Beach Lift Station, and
- 3 the 5.6km North Shore Line



Your Property's System

The final component of constructing the new system is the portion on the homeowner's property. Lot owners are responsible for all work within their property, and associated costs, to connect their existing or future building to the collection system, including the purchase of an approved grinder pump.

Extending the service stub from the property line to your tank location this summer using Summer Village contractors could minimize your costs. The price will reflect bids obtained on a larger project and it would eliminate the need to dig an extra excavation pit on your property to connect subsequently to the service stub that otherwise would be at your property line. The deadline for lot owners to commit is June 25, 2021.

Based on the recommendations of the project's engineering consultants, Stantec Consulting Ltd., the Village of Sunbreaker Cove has chosen a Grinder Pump System, with the compatible grinder pump to be purchased by all homeowners. This system has been used by the other Summer Villages around Sylvan Lake, as well as many other Alberta municipalities, and is proven to be very reliable, durable and cost effective. Sewage is conveyed by gravity from your home to the tank, where the grinder pump grinds the solids and pumps the sewage into the pressurized pipe system.



THE GRINDER PUMP SYSTEM:

- ✓ Requires no modification to your home's indoor plumbing system and may require only minor modifications to your existing holding or septic tank if the tank does not leak,
- ✓ Requires a power supply,
- ✓ Includes a backup prevention valve (check valve) that prevents sewer backup from the sewer mains, and
- ✓ May include an alarm on the control panel that advises the homeowner should the system require attention.

Tanks should be of sufficient size to accommodate at minimum 2 days of expected wastewater volume (2.7 m³ or 600 gallons) to buffer peak flows within the system.

Lot owners may want to take measures to prevent their system from freezing. This could include ensuring a buried depth of at least 2.70m, or adding either insulation or heat tracing, or a combination thereof. If the depth is 2.70m, it is very unlikely that freezing would be encountered as that is a standard depth in municipalities across Central Alberta.

All grinder pumps in our wastewater collection system need to be approved by the Summer Village and need to meet specific performance requirements. Additional information about pump requirements will be provided later this spring. The contractors who will install your pump can provide specific pump recommendations. Consider selecting a pump with a guide rail system, also known as an auto coupling set, that enables the pump to be easily lifted or lowered within the tank, for cleaning or maintenance duties without the need to disconnect fittings, fixings or pipe work when you purchase/install the pump.

Construction Timeline



Municipal System Final Design	Complete
Tender Release	Dec 17th, 2020
Tender Deadline	Jan 21, 2021
Landowners to Submit Forms to Stantec	By March 1, 2021
Sewer Main Construction Commences	By May, 2021
Service stub extension commitment by owners	June 25, 2021
Service Connection Construction	Summer 2021
System Operational	By October 2021

Sunbreaker Cove will:

- ✓ Provide lot owners both a quote and a contract to have SBC contractors extend the service stub into private property. The deadline for lot owners to commit to the work is June 25, 2021,
- ✓ Provide lot owners with the ability to pay their share of any debenture cost in full prior to construction to save interest costs,
- ✓ Finalize capital construction financing,
- ✓ Oversee system construction, implementation and operation,
- ✓ Own and operate its own municipal utility,
- ✓ Enter into appropriate agreements with neighbouring municipalities and the regional commission relating to the connection to, and use of, the regional transmission line,
- ✓ Arrange for licensed staff or a contracted firm to operate the local collection system and liaise with the regional commission as required, and
- ✓ Pay the regional commission and bill property owners for use of the service



Homeowners will:



- ✓ Decide whether or not to tie-in this summer. All property owners which generate wastewater are required to disconnect from any private wastewater system and connect to the new system within two years of it being operational.
- ✓ Decide whether or not to commit to use SBC construction contractors by June 25, 2021.
- ✓ Liaise with the Summer Village office and contractors as required. Owners or their agents shall submit Service Connection design plans to the Summer Village for review and approval prior to the start of Service Connection construction as stated in 6.1.1 of the Municipal Wastewater Collection System Bylaw, and
- ✓ Approve and pay for any connection related work on their property.

As a courtesy, the Administration of Summer Villages is providing the following contractor names. Residents are welcome to use any accredited professional they choose.

PLUMBER FOR TANK INSPECTION, PUMP AND GRINDER INSTALLATION

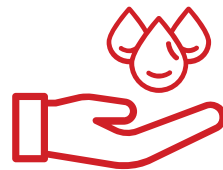
Xandal Backhoe Ltd. Alex Quast (403)-782-1716

ELECTRICIAN

Benjamin Zukiwski, Master Electrician (587) 897-0955

To watch a video from Alex and Benjamin on this project, please go to:

www.sylvansummervillages.ca/wastewater.html



Why This System is Good for Our Community



The new system offers several advantages including:

ENVIRONMENTAL BENEFITS:

- Help protect our lake and the quality of our environment.
- Long term protection of the potable water aquifers.

COMMUNITY BENEFITS:

- Piped wastewater systems are the social norm in developed communities.
- The new system will meet evolving community expectations for urban-level wastewater services.
- Long-term sustainability of our communities.

FINANCIAL BENEFITS:

- An anticipated increase in individual property values.
- Reduced impact on roads and road maintenance costs by eliminating wastewater trucking.

Let's Stay Connected

The new wastewater treatment system will provide a reliable, safe and easy to use service for many years to come.

If you have any questions or concerns, please don't hesitate to contact:

Summer Village Administration
(403) 887-2822

