

Beaver Mines Water and Wastewater Project Briefing

March 14, 2019 updates in Bold

The Beaver Mines Water and Wastewater project is broken into three components for tracking and discussion purposes, water supply, water distribution and wastewater collection, and wastewater treatment.

Further capacity study was required following the Provincial Governments announcement of supplying water for Castle Parks and Castle Mountain Resort through the Regional Water System.

A project information meeting was held September 27, 2017 in the Coalfields Hall from 4:00 to 7:00 pm.

- 1) The water supply project includes water treatment plant upgrades, piping to the Hamlet including a booster pump station along the route, and a reservoir and re-chlorination unit.
 - a. Council has commissioned MPE Engineering to do the detailed design and tender of this project.
 - b. The project is in the detailed design phase in order to prepare a tender to go out in the spring of 2017. A prequalification tender for contractors has been initiated, and will close on June 26, 2017, to be followed by a tender for the pipeline and mechanical components. 15 pipeline contractors and 7 mechanical contractors responded to the prequalification processes.
 - c. MPE Engineering is doing a detailed survey of the Hamlet to confirm elevations of homes. A letter of introduction from the MD is being supplied to residents requesting the surveyors be allowed onto private property. Ongoing.
 - d. Negotiations with landowners is continuing and we will know in June the pipeline route. Legal documents are being prepared for signatures. Completed.
 - e. Confirmation of the reservoir site layout has been finalized.
 - f. Construction for this component of the project is tentatively scheduled for completion in the spring of 2018.
 - g. Location of Booster Pump Station is finalized.
 - h. Capacity issues with the Regional Water System infrastructure from the Oldman dam reservoir to Beaver Mines resulting from the Castle Area Servicing were identified and have now been incorporated into the systems design.
 - i. Prequalification of Pipeline and Mechanical contractors is complete. The pipeline contract tender documents have been distributed to pipeline contractors. The mechanical tender documents will be distributed in September/October.
 - j. The Pipeline Tender closed on August 30, 2017 with 6 tenders being submitted. The low tender was L.W. Dennis Contracting Ltd with a tender of \$2,384,110.58.
 - k. A pre-construction meeting was held with LW Dennis Contracting Ltd to go over project issues that had been identified. They will be mobilizing on October 30th, starting to fuse pipe on October 31, and starting pipeline boring soon after that.
 - l. Prequalified Mechanical Contractors received copies of the Mechanical Tender for review. A pre-tender site meeting was held on November 1, 2017 to give contractors an opportunity to see the site conditions for the mechanical portion of the contract. The tender close date for the Mechanical contract is November 21, 2017. The tender close date was extended by 2 days to accommodate contractor requests for more time to prepare.

Beaver Mines Water and Wastewater Project Briefing

- m. The Mechanical Tender closed on November 23, 2107 with 4 tenders being submitted. DMT Mechanical Ltd was the low tender with a tender of \$4,816,322.70.
 - n. The Mechanical Contractor noted that casings into the Oldman Dam Reservoir are complete.
 - o. Following a winter shutdown, the pipeline contractor is looking to resume construction of the pipeline.
 - p. The basement vault for the raw water intake building is installed.
 - q. Changes to the piping requirements inside the water treatment plant have been initiated.
 - r. As of May 17, 2018 both the mechanical and pipeline contractors are working on the project.
 - s. Work on the reservoir site in Beaver Mines has commenced.
 - t. Commissioning of the new Raw Water Intake in the Oldman Dam Reservoir has begun. Once completed, the existing raw water pipeline from the Water Treatment Plant to the South Fork hill can be cleaned to be repurposed for treated water to Beaver Mines.
 - u. Work on the raw water booster station is progressing well including installation of the new power line.
 - v. Work on the Castle River Crossing has been completed.
 - w. **The booster stations, water treatment plant upgrades and Beaver Mines water reservoir are complete and are being commissioned. The pipeline is being commissioned up to the Beaver Mines metering station. Once the pipeline is commissioned the reservoir and metering station will be commissioned.**
- 2) The water distribution and wastewater collection component of the project includes the installation of pipes in the Hamlet to connect residents to the water reservoir and to connect to the wastewater treatment force main.
- a. Council has commissioned MPE Engineering to do the detailed design and tender of this project.
 - b. At project start up meeting with MPE Engineering, options that provided fire flow water capacity and gravity waste water collection for all sites were chosen. These options were also noted as preferred at meetings held with local residents.
 - c. The detailed design phase of the project is expected to take most of 2017 with the tender happening once a wastewater treatment option is chosen.
 - d. It is not expected to be constructed until 2018 or later, as in addition to being able to tie into the reservoir, connection to a wastewater system for residents requires, that a wastewater treatment system is operational as well.
 - e. Where required, easements for utility crossings on private land are being identified. Consultation with land owners has been initiated.
 - f. Piping options that provide full fire flow and a fire smart community are being reviewed.
 - g. Meetings with Atco Gas have identified areas where their upgrades in the Hamlet and the water/wastewater systems have conflicts. The conflict areas have been reviewed and proposed solutions found. **Atco Gas is looking to upgrade segments of their infrastructure in 2019.**
 - h. Detailed design and land easements **negotiations** are nearing completion.

Beaver Mines Water and Wastewater Project Briefing

- i. Council adopted a terms of reference for a Beaver Mines Community Association Advisory Committee to provide administration assistance in ensuring the project maximizes efficiency and minimizes disruption during construction.
 - j. Packages are being developed to provide information to residents on the project including: applications, residential parcel information, utility bylaws, possible costs, etc.
 - k. Minor edits are being made to the design documents based on information provided by the Beaver Mines Community Association Advisory Group.
 - l. **Options being considered for communicating the project information to residents and landowners include breaking down the information into smaller packages and holding information sessions.**
- 3) The wastewater treatment system component of the project includes a force main to the wastewater treatment system from the Hamlet.
 - a. The Municipal District is awaiting word in the spring of 2017 on a grant application for this component of the project. On May 29, 2017 the Province announced the AMWWP grant funded projects, no grant was received for this project in 2017.
 - b. Land negotiations for an easement for a wastewater force main are ongoing.
 - c. Council has commissioned MPE Engineering to do a detailed design of this component of the project.
 - d. Council has requested additional information on the Mill Creek site access.
 - e. Meetings with area residents were held to discuss preliminary details of the project and to listen to their concerns.
 - f. A meeting to discuss access to the Mill Creek site was held with the local landowner and MPE engineering. Options on access have been developed and are awaiting review and comment.
 - g. A Historical Resources Assessment of the site will be initiated in October 2017. An informal walkabout with local landowners and Arrow Archaeology Ltd. occurred on the proposed site on Saturday October 21, 2017.
 - h. Boreholes and test pits to accommodate Historical Resource Impact Assessment and Geotechnical investigation are completed. Awaiting reports before determining next steps.
 - i. Following the determination that the Mill Creek site was not a viable site for a wastewater lagoon, Council directed MPE Engineering to look at other sites and options, as well as enter into communications with the Town of Pincher Creek to determine if using their lagoon at Pincher Station is a viable option.
 - j. Meetings with the Town of Pincher Creek were held to look at the viability of using the Town's lagoon system.
 - k. A request for proposals is being developed to look for alternate sites for a wastewater treatment system.
 - l. The request for proposals for land closed on May 10, 2018. No responses were received.
 - m. Additional letters have been sent to landowners whose land met criteria for further investigation. Two landowners responded to letters indicating they are not interested in selling land for a waste water treatment system.
 - n. Two parcels of land are being investigated to determine if they are viable for a wastewater treatment option.

Beaver Mines Water and Wastewater Project Briefing

- o. Council reviewed options on types of wastewater treatment systems and land locations at their November 13, 2018 meeting and chose to go with a lagoon system. Negotiations with land owners is ongoing
 - p. **Council is reviewing all options presented to date to confirm the preferred option before committing to the next steps.**
- 4) The Castle Servicing component of the project integrates the Castle requirements into the Beaver Mines Servicing and Beaver Mines Water Distribution components of the project. As well the pipeline from Beaver Mines to the Castle Parks and Castle Mountain Resort.
 - a. A meeting was held with Alberta Environment and Parks, Alberta Tourism, Alberta Transportation, MPE Engineering and the MD to discuss some of the technical issues associated with supplying water to Castle Parks and Castle Mountain Resort. A meeting with Castle Mountain Resort staff identified historical use and provided insight into the long term development requirements for water, excluding water for making snow. Note: The water line to the Castle Mountain Resort is not intended to supply water for snow making. The final report of the Castle Area Servicing Study was provided on August 4, 2017.
 - b. MPE was commissioned to do the detailed design of the Castle Servicing project.
 - c. On November 1, 2017, the pipeline route to Castle Mountain Resort was toured to determine the best route and any impediments to the project.
 - d. Castle Mountain Staff provided a tour of their facilities to familiarize MPE Engineering with their equipment as the pipeline termination will need to be coordinated.
 - e. On November 22, 2017 a meeting with Alberta Transportation, Alberta Environment and Parks, MPE Engineering and Municipal District staff identified project requirements for dispositions, regulatory reporting, routing, plan review and probable timelines.
 - f. Detailed design of the project is underway and requirements for environmental assessments are being identified to allow for spring and summer assessment work.
 - g. Land negotiations are ongoing.
 - h. A request for prequalification of pipeline contractors has been initiated and will close on September 27, 2018. The tender documents will be provided to contractors who prequalify.
 - i. Tenders for the Castle Pipeline contract closed on November 8, 2018;
 - j. **The contract for the pipeline has been awarded to L.W. Dennis Contracting Ltd. Construction activity will commence this spring.**
 - k. **Tender closes for mechanical systems including booster stations on March 21, 2019.**