

FOR THE RECORD

February 12, 2020



NELSON FIBRE

Nelson has had its own fibre for almost 20 years. It was first installed to City buildings as a cost-savings initiative. The City was able to eliminate the cost of over 100 individual phone lines and instead have only a few phone lines that were connected through fibre to all City buildings.

Between 2011 and 2014, the City took advantage of the Nelson Hydro downtown voltage conversion and put conduit for fibre in the ground while the new electrical distribution lines were being installed underground. This allowed the City to start to supply “dark” fibre to downtown businesses. This allows high use customers to bring fibre to their buildings and improve their speed and in some cases, reduce their costs. Not only did it benefit those businesses directly, but it also supported our local Internet Service Providers. The last major component of Nelson Fibre was entering into a contract in 2014 with the Province of BC to install fibre to all the schools and the College campuses in Nelson. The Province also pays an annual fee to lease this fibre from the City.

There have been a number of changes over the years on how the City bills for fibre to reflect the change in the business environment and to support our local businesses. The City is in the fibre business primarily for its own needs which has allowed the City to extend our core internal fibre backbone to service the business community. With the ongoing cyberattacks, it is now even more important to ensure the City’s assets are secure by having its own dedicated fibre lines to its critical infrastructure such as water, the sewage treatment plant, and Nelson Hydro. The financial costs and benefits of having our own fibre is reported out to Council and community as part of the annual financial planning process. The following is a link to the overview of the Nelson Fibre. <https://www.nelson.ca/476/Fibre-Optic-Services>

As noted above it is important to differentiate between fibre servicing external customers and fibre for the City’s own operations.

The recent fibre installation across the West Arm of Kootenay Lake (next to the orange bridge) is a Nelson Hydro Project. It is not a Nelson Fibre Project. It was paid for completely by Nelson Hydro. The fibre install costs were \$155,000, of which \$14,000 was the cost of the 264 strands fibre. Although 264 strands of fibre is a lot more than is required for Nelson Hydro’s purposes in the foreseeable future, the premium for these additional strands was minimal and opens up

a number of future opportunities for the City to utilize these extra strands. As the installation costs wouldn't change regardless of the number strands, the premium to go to 264 strands is minimal. Council felt having these extra strands of fibre was well worth this small additional expenditure. Remember Nelson Hydro spends around \$4,000,000 per year on capital improvements.

The purpose of the fibre crossing the river is for the Nelson Hydro SCADA system and future meter reading capabilities. Nelson Hydro's preference would have been to install fibre across the river in the future, but with the power cable install in 2019, it was an excellent opportunity to reduce this cost now. Having a dedicated fibre project at a later date would have resulted in its own standalone costs for construction, modification, project management, permitting and so much more. The majority of these costs were avoided by combining the existing submarine cable project.