



The Corporation of the City of Elliot Lake

Staff Report

Report of the **Director of Public Works**
for the Consideration of Council

RE: Hillside Drive North Capital Roads Project

OBJECTIVE

To provide Mayor and Council with information regarding the next major road project on the City's priority list.

RECOMMENDATION

THAT Staff Report dated September 13th, 2021 of the Director of Public Works be received;

AND THAT the report be referred to the 2022 Ad Hoc Budget Committee,

Respectfully Submitted

Approved

Daryl Halloch
Director of Public Works

Daniel Gagnon
Chief Administrative Officer

BACKGROUND

In 2016, Council directed staff to prioritize a list of roads throughout the City that factors the age and shape of both the road and underground infrastructure including water, sanitary and storm. Using the Ontario Good Roads Association roads tool and information supplied by the water and wastewater staff, a priority list was slowly developed, which has helped identify and prioritize each capital road project.

In 2018, staff tackled the first project on the list that involved the replacement of 1000 meters of road surface, watermain, sanitary and storm piping located on Valley and Hemlock. This project was completed in just over 40 weeks costing close to 4 million dollars including engineering costs. The next project started in 2020 and is located on Pine and Poplar, which is the oldest part of the city and dealt with several watermain breaks over the years. This project is scheduled to be completed by October of this year and costing a total of \$3,500,000 to complete.

With the first two projects completed, staff now realizes, that projects of these size involving the replacement of underground infrastructure, take a minimum of two years to complete, especially when factoring in the shorter northern construction season. With this in mind, staff are now looking at doubling up on projects, where one project will involve the full replacement of underground infrastructure, while the other would take a less in-depth approach of only replacing the road surface.

ANALYSIS

Looking ahead, staff is proposing the third project on Hillside Drive north from Hutchinson to Highway 108, addressing all below ground infrastructure including water distribution, sanitary sewer and the transmission main. The storm sewer will be a complete removal and replacement, where the sanitary sewer and transmission main is to be determined, possibly a lining candidate, which needs to have a camera inspection to find out and would be part of the detailed design process.

Road work would include complete removal and replacement of the sidewalk, concrete curb & gutter, asphalt, granular, sub drains and geotextile/geogrid. A geotechnical investigation would identify the requirements, however for budgeting purposes we priced according to Pine & Poplar for now and are proposing the addition of a new sidewalk linking Ontario Avenue down to the trail systems along highway 108 (see attached drawing)

This road area is well known for the development of natural speed bumps located both across from the fire hall and at the lights located at the corner of Ontario Avenue and Hillside Drive North. With this section of road being a main corridor to the downtown area and frequently travelled by emergency vehicles, priority is high to address the problems identified.

DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT COST	ITEM COST
Road Reconstruction	1,100	m	\$ 2,550.00	\$2,805,000
Sanitary Sewer Replacement	700	m	\$1,000	\$700,000
Watermain Replacement	550	m	\$1,000	\$550,000
Storm Sewer Replacement	900	m	\$1,000	\$900,000
Lighting	2,000	m	\$100	\$200,000
Transmission Main lining	900	m	\$700	\$630,000
Contingency				\$400,000
Subtotal				\$6,185,000
HST				\$804,050
Total estimated cost				\$6,989,050

For comparison purposes, the Pine & Poplar project was approximately \$5,050/m for the construction costs. Hillside Drive North \$5,625/m will be higher due to the concrete curb and gutter, concrete sidewalks, and potential for lighting and possible transmission main lining.

Surveys, Geotechnical, Design & Tender	\$100,000
Contract Administration & Inspection	\$360,000
Subtotal Engineering	\$460,000
Harmonized Sales Tax (HST)	\$59,800
Total Estimated Project cost	\$519,800

Again, for comparison purposes, the Pine & Poplar project is expected to be approximately \$410/m for engineering costs. The Hillside project at \$420/m will be slightly higher due to the additional testing for concrete works, as well as design for electrical and transmission main lining.

FINANCIAL IMPACT

This project would take two years to complete at a total estimated cost of \$6,645,000 plus applicable taxes to complete. The city can utilize annual OCIF funding of \$330,000 plus the annual federal gas tax of \$650,000 to help offset the cost to tax payers. If the City decides to complete other road projects at the same time, which would only include the resurfacing of the road, the cost is estimated to be around \$350,000 plus tax to complete a 500-meter length of city street, averaging 7 meters existing width.

Staff would continue to seek out any funding opportunities that may come available to help offset the cost of these projects.

LINKS TO STRATEGIC PLAN

This report is consistent with the actions required under “Continued Investment into Infrastructure”.

SUMMARY

In summary, staff is recommending that council approve the decision to move forward with the proposed capital road project on Hillside Drive North from Hutchinson Avenue to Highway 108 for reasons mentioned above.

