Junction Creek Box Culvert Access Structure Project

Chair Bob Rogers
and
Member Joscelyne Landry-Altmann
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Box Culvert System History

• Junction Creek Culvert and Nolin Creek Culvert have total length of 1,755 metres.

• Junction Creek Culvert is 950 metres long; Nolin Creek Culvert is 805 metres long.

• First sections of box culvert built in 1930’s and last 30 metre section was built on Junction Creek north of Elm Street in 1990-1991.

• Currently have three (3) main access points into box culvert; one at each inlet and one at outlet; all access points are inconvenient and dangerous.

• Box culvert system provides vitally important storm water management protection through the downtown core during spring runoff and heavy rainfall events.
Downtown Historical Flooding

Beech St. @ Durham St.

Flour Mill

Junction Creek Downtown
Municipal Infrastructure Issues

- Box culvert system supports portions of many busy streets and other infrastructure in downtown core; eliminated almost annual flooding events.

- Bridge sections that existed when creeks were open channel never removed.

- Bridge sections were built into box culvert sections at all street crossings.

- Recent inspections have shown old bridge structures to be in poor condition.

- City of Greater Sudbury initiated bridge repair/rehabilitation program in 2006, and doing two (2) more bridges in 2008.
Elgin Street Bridge Project - 2006
College Street Bridge Project - 2006
Box Culvert Access Structure

- 2004 technical inspection report done for NDCA recommended a structural access point be constructed into box culvert starting with Junction Creek.

- Direct access into box culvert provides many benefits; for ongoing maintenance, for occupational health and safety in confined spaces, and for public safety in the event of swift water rescues.

- NDCA tried to do project in 2004-2005; tenders dramatically exceeded estimate and funding available.

- NDCA decided to wait for right time to reactivate the project.

- Detailed information on structural aspects of access is available.
Example of Safe Hatch
2008 Project Plans

- City proceeding with Larch Street bridge replacement in 2008 (Contract #Eng 08-22); in same area as proposed access structure.

- Technical and financial rationale to do both projects in 2008; also only have to open up Larch Street once which reduces impact on businesses, pedestrians and vehicles.

- Work of Junction Creek Safety Committee recommended access structure be built for public safety. *(see Safety/Rescue Recommendations)*

- City-owned property at 199 Larch Street is selected site; negotiations to lease land have progressed.

- NDCA General Board at June 19th meeting committed to completing access structure project this year.
Larch Street Bridge Inside Culvert
Box Culvert Access Structure Costs

- Total estimated cost of access structure project is approximately $597,645.
- NDCA has most of the funding in place, but not all.
- Short-fall is approximately $121,000.
- Confirmed funding is coming from Ministry of Natural Resources, NDCA 2008 capital allocation and NDCA reserves.
- M.N.R. funding must be used in 2008; if not used has to be returned.
- NDCA is pursuing several options for extra funding, however, no immediate approvals are expected.
NDCA Request to Member Municipality

- NDCA is requesting additional capital support from member municipality in 2008.

Options NDCA is presenting for consideration:

1. City could make one-time grant allocation in 2008 for total short-fall

2. Any supplementary funding received by NDCA in 2008 would be used to reduce City’s 50% local share extra commitment

3. City could advance total short-fall in 2008 and then recover total amount in equal shares over next two budget years from NDCA’s permanent capital.

NDCA believes access structure project is vitally important for public safety to protect our watershed residents and community infrastructure.
Thank You

Questions?