Abbott Street East and Shea Road Pole Line Extension

As a regular part of its business, Hydro Ottawa routinely evaluates the reliability and capacity of the electrical distribution system throughout its service territory. In order to maintain high quality electrical service and safety for our customers and staff, Hydro Ottawa must rearrange, replace, upgrade and install equipment from time to time.

The construction of a new pole line along Abbott Street (Iber Road to Carbery Drive) and along Shea Road to approximately 500 meters south of Abbott Street is required to meet growth in the area.

Hydro Ottawa's Electrical Distribution System

- Hydro Ottawa is obligated to meet the electrical needs of the City, both present and future.
- Hydro Ottawa's existing facilities in the area are nearing full utilization levels.
- A new circuit is required to provide backup to the Village of Stittsville, additional capacity to the growing area, increased operability and allow for the connection of new customers.

Electricity Act, 1998

- Hydro Ottawa has the legislative right to install structures, equipment or other facilities within the road allowance under section 41 of the *Electricity Act, 1998*.
- While road allowances are designated as utility corridors under Ontario law, Hydro Ottawa works closely with City staff, and City Councillors, to ensure that the placement of electrical infrastructure takes into account the City's future needs and the concerns of local residents.
- Hydro Ottawa and the City must agree upon the location of these structures, equipment or other facilities within the road allowance.

Overhead vs. Underground

- As a regulated utility, Hydro Ottawa is expected to keep rates as low as possible for customers, which means we have to make prudent decisions about how we invest in our infrastructure.
- The cost of underground installation is typically 5 to 10 times more expensive than overhead installation, depending on a number of factors such as location and number of service installations.
- **In this case, the investment required is 1.25 million for overhead servicing compared to 6.2 million for underground.**
- To be fair to all neighbourhoods, Hydro Ottawa applies the same standards across its service territory. As per section 2.1.5 of our Conditions of Service document, power lines are installed overhead when they are on or crossing municipal arterials, major collectors, highways, rivers, railways, open fields, rural areas and business parks, excluding greenfield residential areas.
- Hydro Ottawa will undertake underground installations along arterial roads if this work is funded by other parties. However, installing underground infrastructure along all arterial roads would significantly increase rates for all customers.
- Within these parameters, we work closely with the City and City Councillors to ensure community needs and concerns are taken into account.
- Hydro Ottawa is not permitted to apply a local improvement levy under the current Ontario Energy Board (OEB) regulated rate structure.

Electric and Magnetic Fields (EMFs)

- Electric and magnetic fields (EMFs) are associated with power lines and other electrical assets such as transformers and substations.
- Underground power lines as well as household wiring, lighting, computers, and other electrical appliances such as hair dryers, coffee makers, televisions and power tools also generate them.
- EMF levels are higher at ground level from underground wiring than from overhead wiring due to the shorter distances.
- Health Canada states "when you are indoor at home, the magnetic fields from high voltage power lines and transformer boxes are very weak when compared to the fields from electrical household appliances."
- The distribution lines being installed by Hydro Ottawa in this case are not considered high voltage, and as such the electrical fields associated with them would be even lower.
- More information about EMFs may be found online at the Canadian Electricity Association Web site www.canelect.ca or Health Canada's Web site www.hc-sc.gc.ca. Additional information may be found on the World Health Organizations' website at www.who.int/peh-emf/en.

Project Plan

- The current plan is to run the hydro line on the east side of Shea Road from Abbott Street to the south side of the Goulbourn Recreation Center. The line along Abbott Street will be positioned on the south side from Carbery to the Granite Ridge Long Term Care Facility and then cross over to the north and continue east until Iber Road.
- This proposal will have less impact on the existing vegetation along Abbott Street and in particular on the Trans Canada Trail.
- It will also move the lines away from the backyards of some of the residents on Abbott Street.
- This project includes increasing the height of some poles. In comparison with our older cross-arm construction, newer vertical pole lines reduce the amount of future tree trimming required. Vertical pole lines also provide a safer work environment for our powerline maintainers. Cross arms result in a more congested work area, placing employees in closer proximity to adjacent circuits.
- Hydro Ottawa maintains building clearances from new pole lines as per its standard OLS0002 (which can be found onHydro Ottawa's Web site).