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Highway 7 Town Centre Blvd. to Sciberras Road Hydro Undergrounding

**PRESENTATION TO
DEVELOPMENT SERVICES COMMITTEE**

May 19, 2015

Background

- January 2012 - Staff report to Council regarding hydro undergrounding, costs and funding options
- June 2012 - Markham Council Resolution not to proceed with hydro undergrounding on Highway 7
- February 2015 - Markham Council requested meeting with Region and PowerStream regarding Highway 7 hydro undergrounding
- Mayor, Regional Chair, Regional Councillors, PowerStream and Senior Staff met March 5, 2015
- Region, Markham and PowerStream staff met March 17, 2015 to review issues related to hydro undergrounding
- April 24, 2015 - PowerStream Board prepared to contribute funds subject to conditions

Background Cont.

- Key Issues regarding Hydro undergrounding are:
 - Technical
 - Costs
 - Funding
 - Schedule



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Technical

- Preliminary design of hydro undergrounding in March 2010 reviewed by PowerStream
- Underground hydro lines required on both North and South boulevards to accommodate existing and proposed development
- 3 transformers and 12 switch gears with 6m x 8m property required within the boulevard or on private property with 3m unobstructed space in front of access panels
- 1m x 0.8m duct banks required for 24 duct structures
- PowerStream insists duct work and access manholes be installed in boulevard and not in road
- Streetscape and boulevard will be encumbered by large switch gear and transformer vaults
- Insufficient space in boulevard for hydro ducts/vaults, municipal infrastructure (watermain, sanitary, storm, trees, streetlights), utilities (gas, Bell) and streetscaping components (sidewalk, bike lane, trees)
- Underground hydro construction activities restricted from December to Spring
- ± \$350,000 required for underground design which will take a minimum of 4 months
- If property is required to accommodate hydro undergrounding and transformers it could take up to 2 years to acquire such

Duct Banks under Construction (before concrete encasement)



Duct Banks under Construction (before concrete encasement)



2.0 Duct Bank after Concrete Encasement



Switchgear Base



Utility Vault





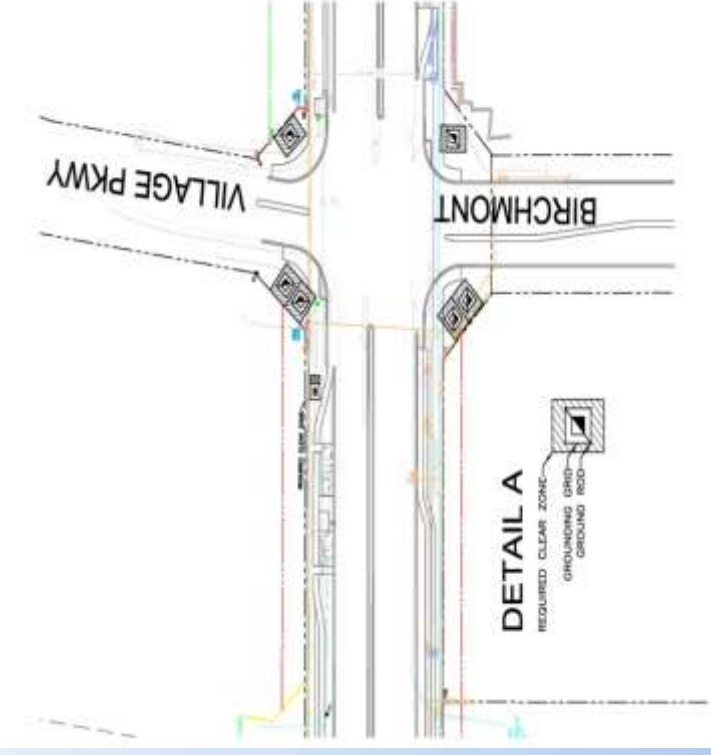
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Switch Gear



Scaled Layout at Birchmount/Highway 7 Intersection

(Showing 6 Switch Gears and 1 Single Phase Transformer in Northeast Blvd)



Financial

Design	\$	350,000
PowerStream updated cost estimate for hydro undergrounding (Town Centre Blvd. to Sciberras Road) (\$1m provision included for winter work not included)	\$	15,100,000
Property/easements for transformer/switch gears - allowance	\$	1,000,000
Other utility undergrounding (Rogers)	\$	2,000,000
Contingency (5%)	\$	<u>972,500</u>
Sub-Total	\$	19,422,500
Funding- PowerStream – committed re: overhead	\$	1,300,000
PowerStream – potential maximum additional contribution to undergrounding	\$	3,000,000
Funding – Region - committed re: overhead	\$	<u>900,000</u>
Net Cost	\$	14,222,500
Additional Streetlight costs (funded by Development Charges)	\$	400,000

Funding

- Funding options and their viability considered in June 2012 Report;
 - Funding by PowerStream
 - Funding through Tax Base
 - Section 37
 - Development Charges
 - Gas Tax
 - Joint Funding – PowerStream, Region, City, Developers
 - Community Improvement Charge
- PowerStream does not have any funding in their 2015 Customer Rate Case to the Ontario Energy Board (OEB)
- PowerStream Board Policy is to pay for only the overhead relocation costs (\$1.3m)
- Region and PowerStream prepared to contribute \$0.9m + \$1.3m (total \$2.2m) toward undergrounding based on their existing assessed cost for overhead hydro
- PowerStream Board on April 24, 2015 agreed to **consider** funding an additional maximum \$3m (subject to conditions for a total of \$4.3m)

Funding

- Options as to assessing \$15.2m to Markham Centre + PD 1-7 Developers were calculated as follows:
- Option A
 - All of Markham Centre and PD 1-7 – undeveloped and not draft plan approved
 - \$175,000/ha; or
 - \$1,500/unit for residential;
- Option B
 - Assess Development – North and South of Highway 7
 - \$514,000/ha; or
 - \$2,500/unit for residential; and
- Number of assumptions used which will impact assessment
 - Draft plan/site plan approved development not assessed
 - Densities, zoning may change and impact assessment
 - Employment lands not included

Funding

- Any funding by Markham Centre and PD1-7 Developers would be subject to negotiation (no statutory basis to require funding)
- Corporate, PowerStream and Developer funding sources currently not finalized
- PowerStream's additional funding of \$3m is conditional and will require deferring/cancelling other projects and as such PowerStream will require further discussion with their Board to determine the final total contribution to the project
- If Markham were to front end cost (\$17.2m) the Corporation would be financially exposed if we weren't successful in collecting/recovering funds from developers and PowerStream

Schedule

PowerStream – hydro undergrounding

- Design - 4 months from July 2015
 - Subject to receipt of PO for \$350,000
- Procurement of materials – 4 months
- Construction - Spring 2016 – Fall 2016

Region – installation of municipal servicing and widening of Highway 7

- Region tendered reconstruction of Highway 7 (Town Centre Blvd to Sciberras Road) on May 7, 2015 on basis of overhead hydro

Schedule Cont.

- Region's proposed schedule and revised schedule with Hydro Undergrounding
 - Overhead
 - Hydro overhead relocation – Winter 2015/2016
 - Construction - Summer 2015 → Summer 2017
 - Underground
 - Utility relocations - Spring 2016 → Fall 2016
 - Construction - Spring 2017 → Summer 2019
- Minimum 2 year delay to Highway 7 reconstruction if hydro undergrounding to be implemented
- Property required for hydro undergrounding could take 2 years to acquire

Summary

- Hydro Undergrounding cost estimated to be \$19.4m
- Currently no secure funding of \$17.2m available
- PowerStream's additional funding of \$3m subject to conditions and further discussion with their Board
- Significant financial exposure if Markham up-fronts costs and tries to collect funds from developers/PowerStream
- Additional streetlight cost - \$400,000 – funded by Development Charges
- Highway 7 reconstruction would be delayed a minimum of 2 year
- Technical issues and conflicts in locating 6m x 8m transformers and switch gears in Highway 7 boulevards
- Streetscaping concerns re: locating 15 aboveground utility vaults in boulevard

Recommendation

- That the May 19, 2015 presentation entitled “Highway 7, Town Centre Blvd. to Sciberras Road Hydro Undergrounding,” be received; and,
- That hydro undergrounding on Highway 7 (Town Center Blvd. to Sciberras Road) not proceed; and,
- That the Region of York be requested to proceed with the reconstruction of Highway 7; and further,
- That PowerStream and Region be requested to ensure all future hydro and utility service connections for development north and south of Highway 7 be undergrounded and any transformers/switchgears be on private property.