

MILLER AVENUE EXTENSION CLASS EA STUDY UPDATE

Transportation Committee

September 11, 2012

Purpose of Presentation

- **Update Council on the Miller Avenue Extension Environmental Assessment Study.**
- **Seek Council endorsement for the preferred alternative of Miller Avenue extension and to authorize staff to undertake a public meeting to present the preferred alternative.**

STUDY AREA



INITIATIVES WITHIN STUDY AREA

- **Markham Centre – Transportation requirements.**
- **Hydro One – Future expansion plan (500 KV line).**
- **Markham Sports, Entertainment and Cultural Centre (MSECC).**
- **Optional parking facility south of Highway 407.**
- **Tributary # 4 relocation and modification to storm water management facility.**
- **GO Transit underpass storm outfall.**
- **Highway 407 Transitway.**

BACKGROUND

- **Various traffic studies have indicated that future development in Markham Centre will require additional east-west road capacity.**
- **An environmental assessment study was undertaken to examine the feasibility of east-west capacity enhancement by extending Miller Avenue from it's existing terminals at Rodick Road easterly to Kennedy Road.**
- **2008 Development Charges Background Study included an allowance to extend either Miller or Yorktech Drive from Rodick Road to Warden Avenue / Birchmount Road.**

Needs and Justification - Transportation

- **Markham Centre is a major growth area**
 - Projected to reach population of 28,650 and employment of 22,100 by 2031.
 - Forecast high growth scenarios build-out estimated at 57,500 people and 54,500 jobs.
- **Markham Centre Transportation Study examined implications of growth and identified transportation needs and issues:**
 - Area needs additional east-west connectivity.
 - Enterprise Boulevard and YMCA Boulevard will be at or over capacity by 2021.
 - Primary issue is getting vehicles to/from arterial roads (i.e. left turn capacity).
- **GTA Centre transportation study recommends extension of Miller Avenue from Warden Avenue to Birchmount Road for opening day.**

Needs and Justification - Transportation

- Miller Avenue would serve to distribute traffic to Woodbine, Warden, Birchmount and Kennedy Road.
- Off-loads traffic from Enterprise Boulevard, Highway 7 and 14th Avenue.
- Would provide access to potential parking south of Highway 407.



Summary of Transportation Needs

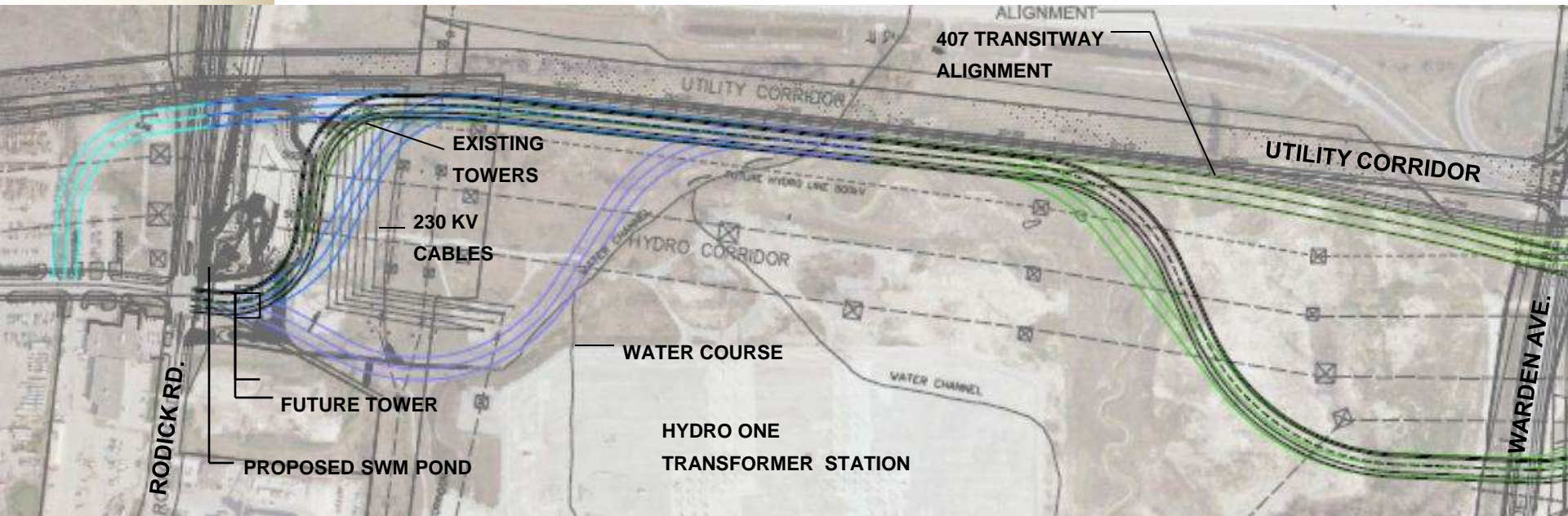
Miller Avenue	Benefit	Assessment of Need
Rodick Road to Warden Avenue.	Provides access to 407 Transitway station at Rodick Road.	Necessity to be reviewed as part of future EA Study for the extension of Enterprise Blvd to Rodick Road.
Warden Avenue to Birchmount Road.	Maximizes benefit of Birchmount Avenue. Provides additional left turn capacity to/from Warden Ave.	Needed to accommodate peak traffic from Markham Centre. Critical.
Birchmount Road to Kennedy Road.	Off-loads intersections at YMCA Blvd and Enterprise with Kennedy, which will be over capacity within study horizon.	Should be protected.

Agency Approval

Ongoing communication with interested agencies including:

- Highway 407 ETR.
- Ministry of Transportation.
- Hydro One.
- York Region.
- CN Rail.
- GO Transit.
- Markham District Energy.
- Ministry of Municipal Affairs and Housing.
- Toronto Region Conservation Authority.
- Utility Companies.
- Infrastructure Ontario (formerly, Ontario Realty Corporation).
- Private property at Duffield Drive.
- Ministry of Environment.
- Ministry of Natural Resources.
- Ministry of Aboriginal Affairs.

Alignment Options Rodick Road to Warden Avenue



Rodick Road at Miller Avenue Looking north-bound



Miller Avenue at Rodick Road Looking east-bound



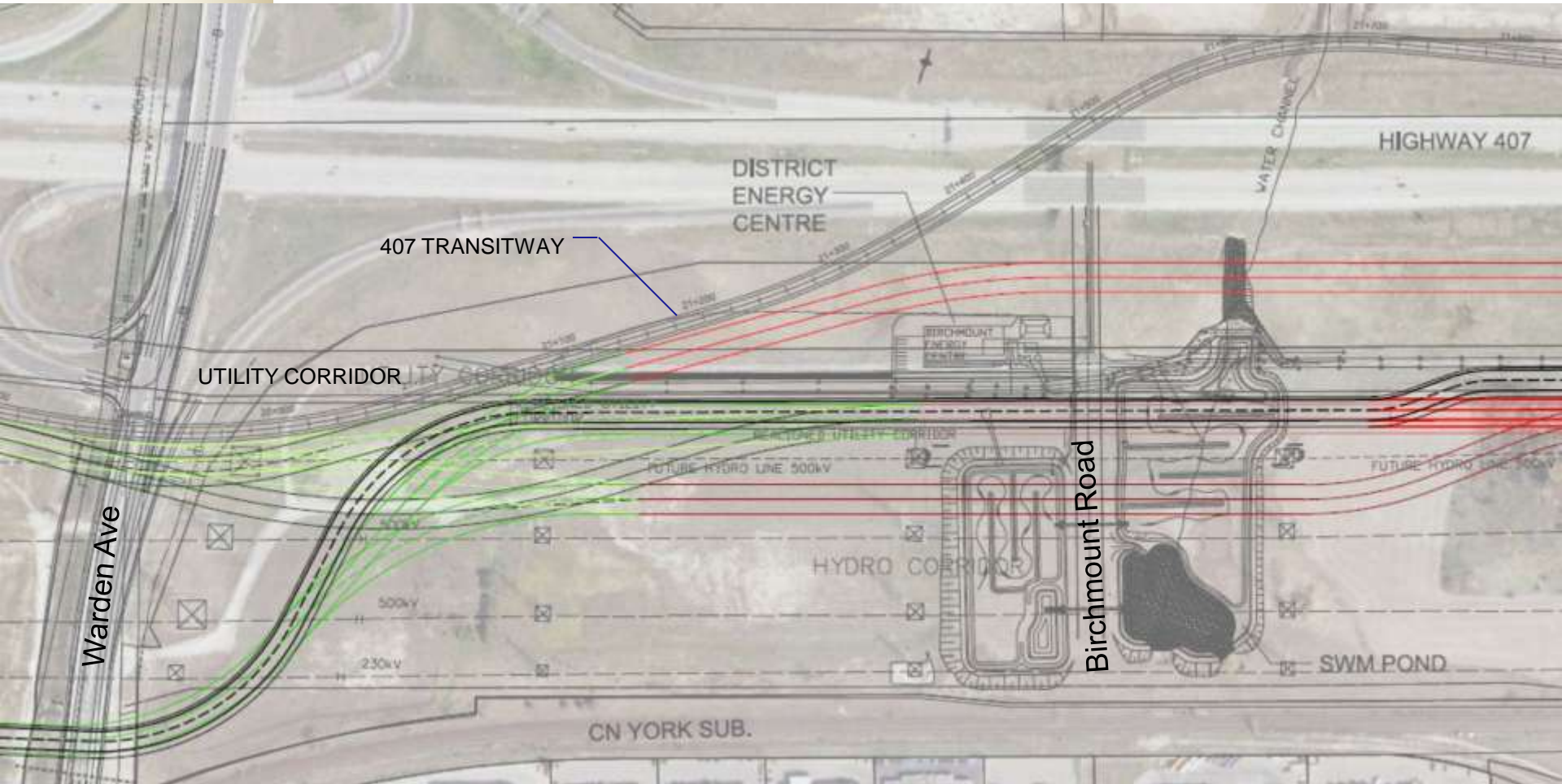
Issues and Constraints Rodick Road to Warden Avenue

- February 2004, agreement between Hydro One, Ministry of Transportation and Markham acknowledged that the proposed Miller Avenue extension will be located on lands owned by Hydro One east of Rodick Road and is subject to approval by MTO and Hydro One.
- Hydro One present position not to accommodate both Miller Avenue extension and proposed storm water management pond east of Rodick Road.
- Future Hydro tower east of Rodick Road interferes with proposed Miller Avenue extension.
- Existing Hydro facilities (Towers, Parkway transformer station, low-hanging cables)
- Off setting intersection of Miller Avenue at Rodick Road may result in operational issues.

Recommendations Rodick Road to Warden Avenue

- Review need for this section of Miller extension for 2021/2031 time periods.
- Do not file the Environmental Assessment report for this section.
- Commence the Environmental Assessment Study for Enterprise Boulevard extension from Warden Avenue to Rodick Road.
- Permit Miller Development to finalize property agreement with Hydro One for the proposed storm water management pond so that Rodick Road (14th Avenue to Miller Avenue) can be completed in 2013.

Alignment Options Warden Avenue to Birchmount Road



Warden Avenue north of CN Rail Looking north-bound



Warden Avenue north of CN Rail Looking south-bound



Birchmount Road north of CN Bridge Looking north-bound



Birchmount Road north of CN Bridge Looking south-bound



Proposed Miller crossing adjacent to Markham District Energy facility



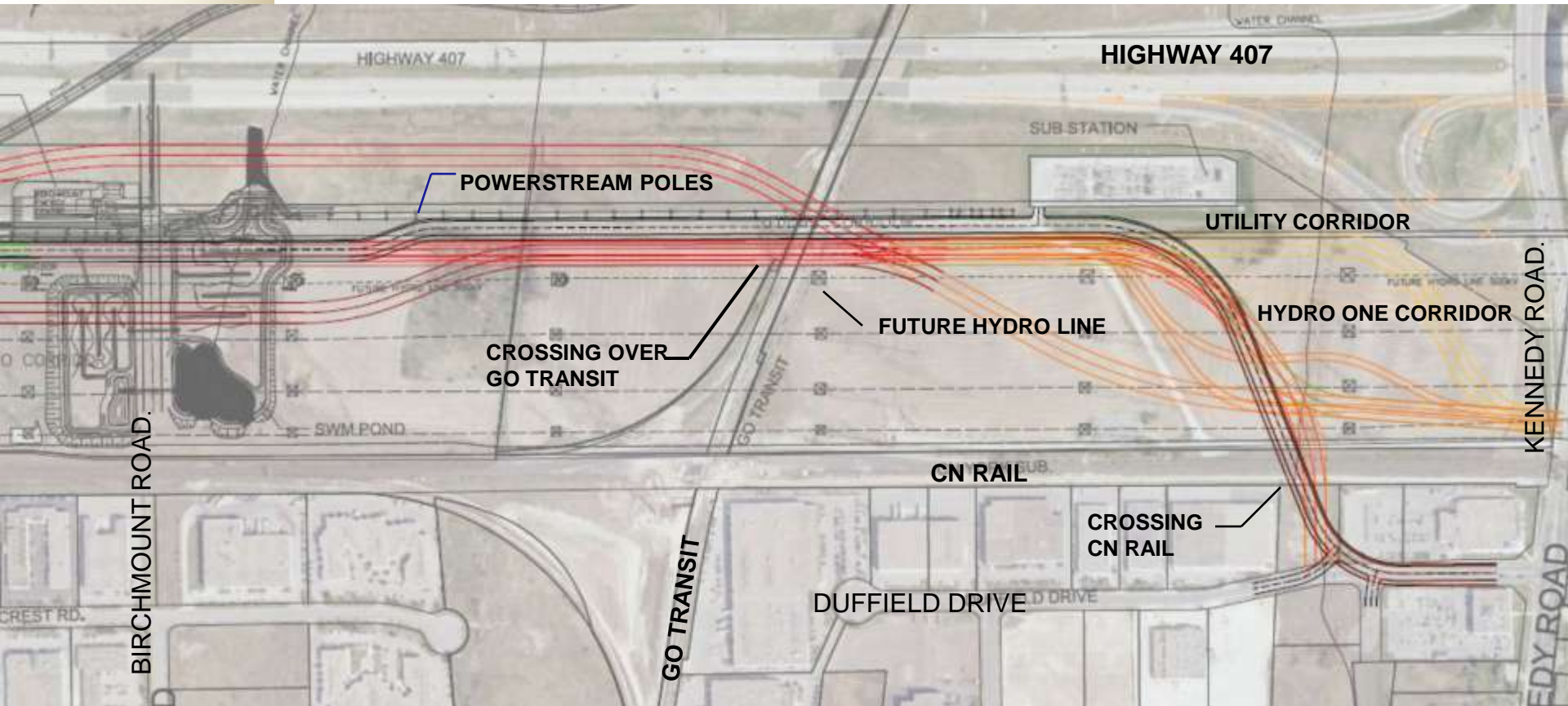
Issues and Constraints Warden Avenue to Birchmount Road

- At grade intersection with Warden Avenue – Preferred Option:
 - Provides direct signalized access to Warden Avenue.
 - Acceptable by the Ministry of Transportation.
 - York Region preferred option.
- Highway 407 ramp extension recommended in MSECC report to be undertaken as a separate feasibility study.

Recommendations

- File Environmental Assessment Report for this section.
- Commence design in 2013
- Include in Development Charges Study (Spring 2013).

Reviewed Alignment Options Birchmount Road to Kennedy Road



Kennedy Road north of Duffield Drive Looking north-bound



Kennedy Road north of Duffield Drive Looking south-bound



Issues and Constraints Birchmount Road to Kennedy Road

- Proposed road extension from Warden Avenue to Kennedy Road is acceptable by Hydro One; subject to certain conditions (i.e. clearances)
- Shifting the alignment to the utility corridor east of Birchmount Road creates conflict with existing PowerStream pole lines.
- Existing storm water management pond to be modified to accommodate road.
- Crossing over CN is not feasible due to substandard vertical clearance with Hydro One towers.
- Connection to Kennedy Road is not supported by York Region, Ministry of Transportation and 407 ETR.
- CN has no objections to the road crossing under the rail provided that the method of construction is approved by CN and Markham be responsible for the costs of construction and maintenance.
- Connection to Duffield Drive is the only other alternative which requires property acquisition and crossing of CN Rail.

Recommendations Birchmount Road to Kennedy Road

- Review need for this section of Miller extension for 2021/2031 time periods.
- Do not file the Environmental Assessment report for this section.
- Review again the feasibility of a Kennedy/Miller intersection when York Region undertakes the EA study for Kennedy Road widening (Steeles Ave. to Hwy7).
- Staff report back as to the acquisition of property at Duffield Drive to protect the future extension to Kennedy Road.
- Include this section of Miller in the Development Charges Study (Spring 2013).

Estimated Implementation Costs

1) Capital Costs:

- Rodick Road to Warden Avenue \$4.7 Million
- Warden Avenue to Birchmount Road \$9.0 Million
- Birchmount Road to Kennedy Road \$45.0 Million*

Total Estimated Capital Costs **\$58.7 Million**

* Includes Grade Separation

2) Property Costs:

Allowance **\$10 to \$15 Million**

Outstanding Approvals Issues

- **Hydro One.**

Proposed road extension from Warden Avenue to Kennedy Road is acceptable by Hydro One on a preliminary level; subject to certain conditions (ie Tower clearances).

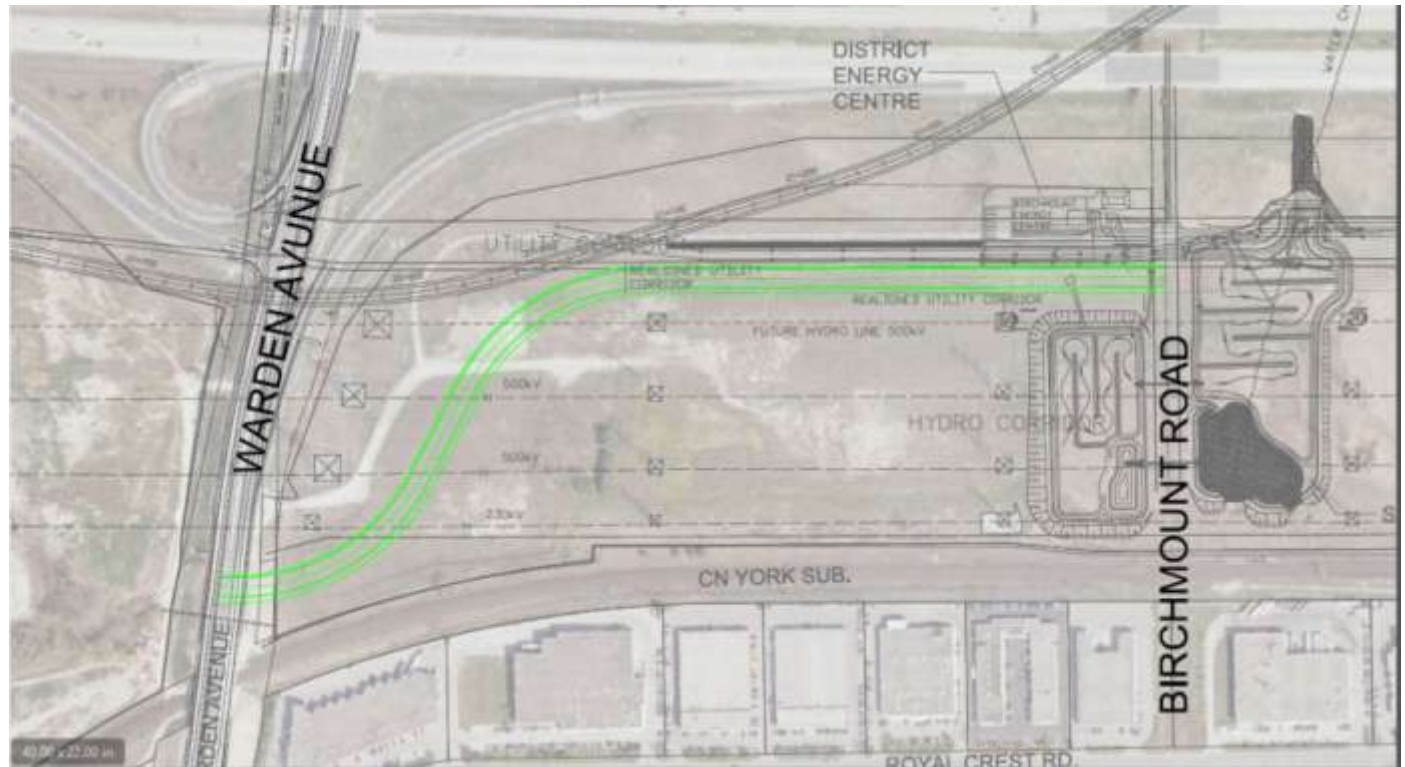
- **CN**

CN has no objections, in principal, to the future road crossing under the rail, east of Birchmount Road. Provided that the method of construction is approved by CN and Markham be responsible for the costs of construction and maintenance.

Recommendations

- **Proceed with the second public meeting.**
- **Markham proceed to complete the EA study and obtain the Ministry of Environment approval for the section of Miller Avenue extension between Warden Avenue and Birchmount Road.**
- **The need/timing for the Miller Avenue extension between Rodick Road to Warden Avenue and Birchmount Road to Kennedy Road to be re-evaluated in the future.**
- **The City authorize Hydro One to finalize their agreement with Miller Development and permit the construction of the future stormpond east of Rodick Road.**
- **Staff report back regarding acquisition of the private property at Duffield to protect for the future extension to Kennedy Road.**

Preferred Miller Avenue Warden Avenue to Birchmount Road



Next Steps

- **Second Public Meeting to present the preferred Miller Avenue extension between Warden Ave and Birchmount Road – October 2012**
- **Staff Report to Council – December 2012**
- **File the Environmental Assessment Report – February 2013**
- **Proceed with design in 2013.**