



Report to: Development Services Committee

Report Date: September 25, 2012

SUBJECT: VIVA Rapidway on Town Centre Boulevard and Cedarland Drive, Closure of Cedarland Drive, License Agreement between the City and York Region, and Site Plan Endorsement

PREPARED BY: Simon Hung, Engineering (ext. 2136)
Michael Fry, Planning (ext 2331)

RECOMMENDATION:

THAT the report titled 'VIVA Rapidway on Town Centre Boulevard and Cedarland Drive, Closure of Cedarland Drive, License Agreement between the City and York Region, and Site Plan Endorsement' be received;

AND THAT Cedarland Drive, between South Town Centre Boulevard and Warden Avenue, be closed from late October 2012 to the end of February 2013 and subsequently be opened to one way, single lane eastbound traffic from March to September 2013 subject to conditions listed in this report;

AND THAT the Mayor and Clerk be authorized to execute an amendment to the existing License Agreement or a new License Agreement between the City and York Region to further identify and clarify the responsibilities of future operation and maintenance of a shared storm system and streetscape on South Town Centre Boulevard and Cedarland Drive;

AND THAT site plan application file no. SC 12 109306, for a rapid transit station within the City's municipal right-of-way on Cedarland Drive, be endorsed;

AND THAT Site Plan Approval be delegated to the Director of Planning or his delegate (Site Plan Approval is issued only when the Director has signed the site plan "Approved");

And that staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

To request approval for temporary closure (late October 2012 to end of February 2013) and subsequent restriction to a one way, single lane eastbound traffic (March to September 2013) on Cedarland Drive, between South Town Centre Boulevard and Warden Avenue during the construction of the VIVA Rapidway.

To request authorization for the Mayor and Clerk to execute an amendment to the existing License Agreement or a new License Agreement between the City and York Region to further

identify and clarify the responsibilities of future operation and maintenance of a shared storm sewer system and streetscape on South Town Centre Boulevard and Cedarland Drive.

To request endorsement of the site plan application to permit a rapid transit station within the City's municipal right-of-way on Cedarland Drive, as part of the VIVA Next transit system.

BACKGROUND:

The construction of VIVA Highway 7 Rapidway between Bayview Avenue and Town Centre Boulevard was started last year. The project also includes the reconstruction of both South Town Centre Boulevard and Cedarland Drive to accommodate the Rapidway (Attachment A). The work on the City roads is slated to begin later this year. A request was submitted by VIVA's contractor to temporarily close and restrict traffic on Cedarland Drive during road widening.

The existing License Agreement (dated June 22, 2010) between the City and York Region needs to be amended to further identify and clarify the maintenance and replacement responsibilities of shared storm sewers and enhanced streetscape which were not finalized in the original agreement.

1. Closure of Cedarland Drive

VIVA's consulting engineer and contractor are requesting approval (Attachment C) from the City to temporary close (late October 2012 to the end of February 2013) and restrict traffic to one eastbound lane (March to September 2013) on Cedarland Drive, between South Town Centre Boulevard and Warden Avenue during the Rapidway construction. Highlights of the request are;

- Utility relocation, construction of the bus platform foundation (Attachment B) and road widening will occur concurrently on Cedarland Drive for a duration of several months and there will not be adequate space available to maintain safe access for both vehicular and pedestrian traffic;
- By closing Cedarland Drive to public, it will allow KED to construct the Rapidway and the municipal road more effectively and hence shorten the construction duration. It is anticipated that the overall schedule can be reduced by two months;
- With Cedarland Drive closed, vehicles and pedestrian may use Clegg Road to move between South Town Centre Boulevard and Warden Avenue where both intersections are signalized. So the impact to the public is expected to be minimal;
- Following the completion of the platform foundations, Cedarland Drive will be opened to one eastbound lane traffic in March 2013. The rest of the pavement will be required for the construction of the platform canopy until September 2013; and

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- H&W Development Corporation has commenced the construction of the phase 1 development abutting South Town Centre Boulevard and Cedarland Drive. Staging areas are set up along the boulevard on these roads and significant construction traffic will be expected for the next 30 months. Once VIVA begins the reconstruction work on these roads later this year, construction traffic will further increase;
 - Driveway on Cedarland Drive to the existing H&W Development Corporation sales office is recommended to be relocated to Clegg Road subject to the agreement of the developer. If the driveway is not relocated, access to the sales office will be maintained.

Staff support the closure of Cedarland Drive for a maximum of 5 months and subsequent restriction to one way single lane traffic for 7 months subject to the following conditions

- While South Town Centre Boulevard is also being widened, VIVA must maintain a minimum of 2 lanes of traffic, one lane in each direction, (existing condition is 4 lanes with 2 lanes in each direction) and pedestrian access at all times during the construction. An road occupancy permit from the Operations Department will be required to reduce lanes on South Town Centre Boulevard;
- VIVA shall prepare a traffic management plan and submit to the Directors of Engineering and Operations for approval prior to the closure of the road. VIVA shall make any adjustments to the plan as required by the City during construction;
- VIVA shall prepare a notice of road closure and circulate to all emergency services, school boards and the residents and business located within 500m of the closure. Specific notice shall be given to CDI Computer on South Town Centre Boulevard that their employees currently park on Cedarland Drive shall find alternative legal parking without using IBM's parking lot;
- VIVA shall place a notice of road closure in the local newspaper (i.e. Economist and Sun) for 2 consecutive weeks prior to the date of the proposed road closure;
- VIVA shall erect advance notification signage stating start and completion dates on site two weeks prior to the closure of the road; and
- VIVA to resolve any outstanding issues with IBM. IBM is generally in agreement with the road closure subject to the following conditions,
 - that the existing IBM driveway on Warden Avenue shall remain fully functional during the closure and traffic restriction on Cedarland Drive.
 - that VIVA agree to monitor the impact of traffic infiltration through the IBM property during the closure of Cedarland Drive.
 - that if the infiltration becomes worse, VIVA shall implement traffic control at the IBM entrance on South Town Centre Boulevard such as restricting south bound traffic into the IBM property. Details of the restriction shall be discussed and agreed by IBM prior to implementation.

- that notice and assistance shall be provided to the visually impaired employees at IBM to ensure they are aware of the changes of the road conditions and maintain a safe route at all times.

2. License Agreement between the City and York Region

VIVA and City staff have been meeting to finalize the design, streetscape and operations/maintenance issues on Town Centre Boulevard and Cedarland Drive. An agreement for the permission to enter, operate, maintain and funding of the VIVA Rapidway through the City roads (South Town Centre Boulevard, Cedarland Drive, Enterprise Boulevard and YMCA Boulevard) was signed in June 2010 when Rapidway was opened on Enterprise Boulevard and YMCA Boulevard. Staff is requesting Council's authorization for the Mayor and Clerk to amend the existing agreement or enter into a new agreement to identify and clarify other issues that were not identified in the original agreement such as warranty and maintenance of the streetscape and shared storm sewer system.

3. Site Plan Application Endorsement

A site plan application has been submitted by York Region Rapid Transit to permit a transit station platform and canopy structure ("Cedarland Station") within the City's Cedarland Drive right-of-way, and to address the interface with the IBM lands immediately to the south of the proposed station and rapidway, as they relate to grading, landscaping and tree preservation.

The proposed transit station is consistent with VIVA's design currently being implemented across the Highway 7 corridor and includes station platforms on each side of the proposed rapidway, each with an open ended canopy to shelter rapidway patrons. The proposed platforms are 55m in length and 4m in width. The canopies are 28.2m in length, approximately 4m in width and approximately 5.2m in height.

OPTIONS/ DISCUSSION:

The combined construction traffic and activities from the H&W development, utility relocation, bus platform construction and road widening on Cedarland Drive warrant the temporary road closure and lane restriction subject to conditions.

Site plan endorsement is required prior to the issuance of a building permit. This will facilitate York Region Rapid Transit maintaining their construction timelines for the proposed "Cedarland Station". Staff will continue to work with York Region Rapid Transit and IBM to finalize grading and landscape issues.

FINANCIAL TEMPLATE

All costs associated with VIVA construction project on south Town Centre Boulevard and Cedarland Drive are the responsibility of VIVA. A fee will be charged to VIVA for the issue of the Road Occupancy Permit for this project.

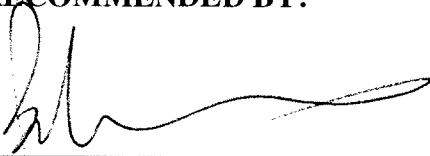
ALIGNMENT WITH STRATEGIC PRIORITIES:

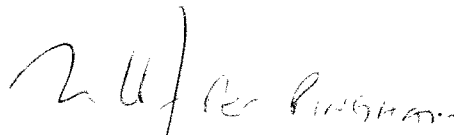
N.A.

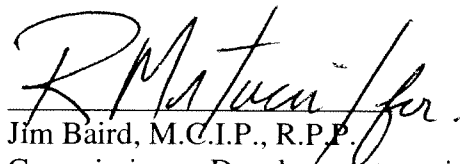
DEPARTMENTS CONSULTED AND AFFECTED:

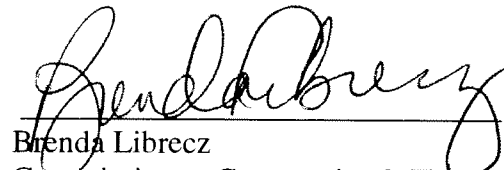
The Legal Department has reviewed this report.

RECOMMENDED BY:


for Alan Brown, C.E.T.
Director, Engineering


Paul Ingham
Director, Operations


Jim Baird, M.C.I.P., R.P.P.
Commissioner, Development services

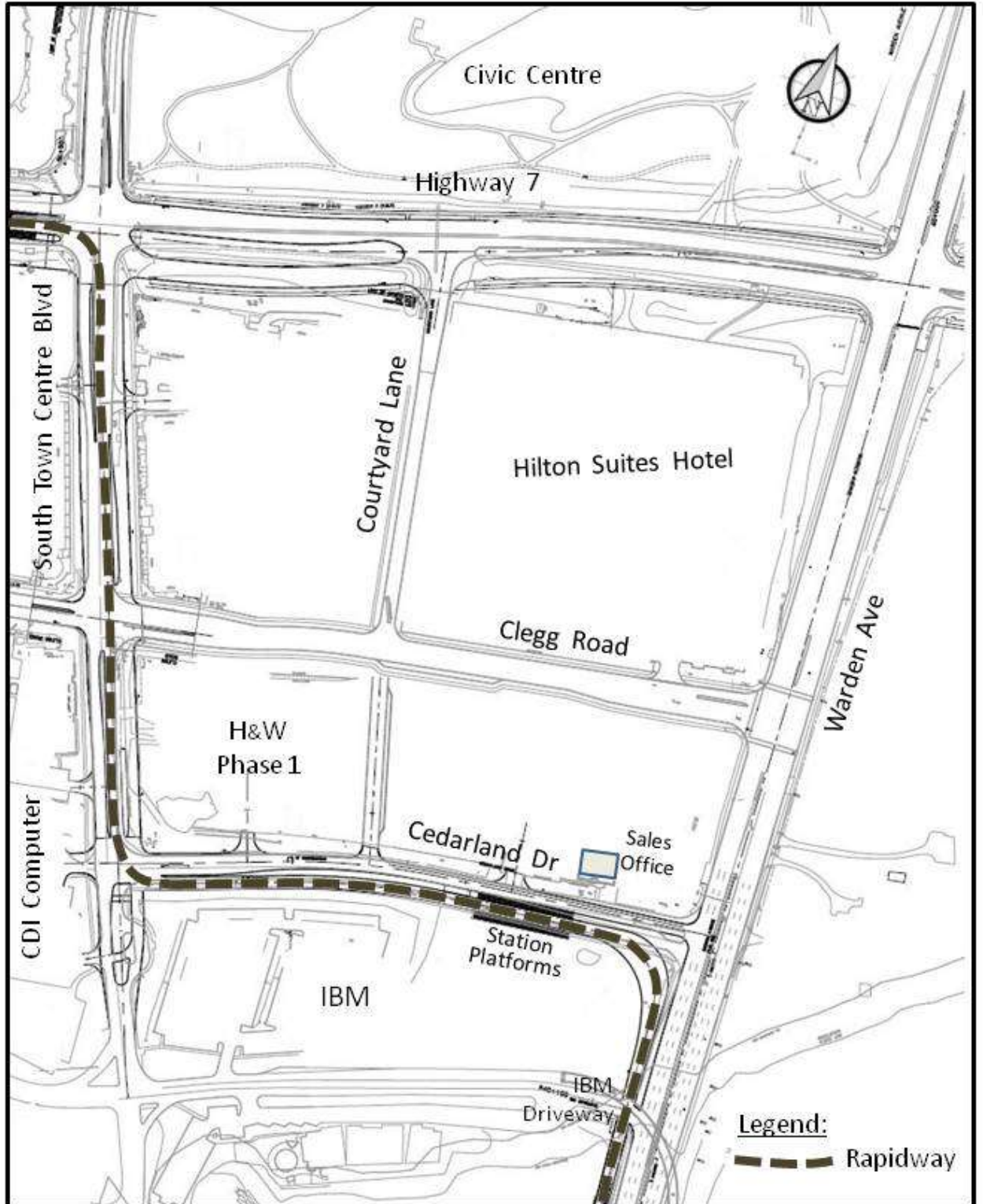

Brenda Librecz
Commissioner, Community & Fire Services

ATTACHMENTS:

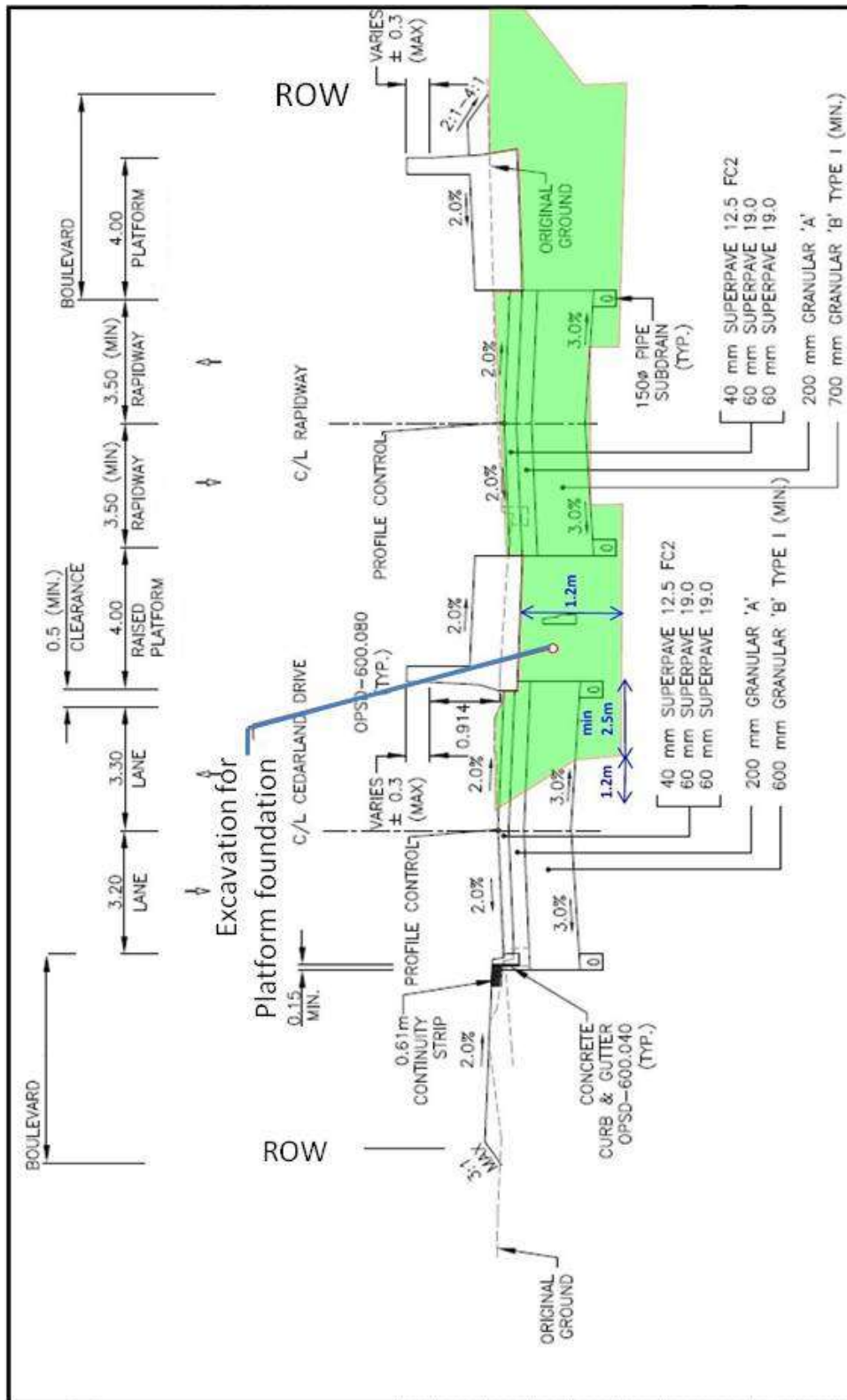
Attachment 'A' – Location map

Attachment 'B' – Cross Section for Platform Foundation Excavation

Attachment 'C' – Request from VIVA's consulting engineer and contractor for the closure of Cedarland Drive



Attachment A – Location Map



Attachment B – Cross Section for Platform Foundation Excavation

Attachment C - Request from VIVA's consulting engineer and contractor for the closure of Cedarland Drive



McCormick Rankin
York Region Rapid Transit Project Office
3601 Highway 7 East, 12th Floor
Markham, ON Canada L3R 0M3
t: 905.886.6767 | f: 905.886.6969
www.mrc.ca

August 29, 2012

Engineering Department
City of Markham
101 Town Centre Blvd.
Markham, Ontario
L3R 9W3

Attention: Simon Hung, Senior Capital Works Engineer

**RE: vivaNext Design Build Project
Highway 7, Bayview Avenue to Warden Avenue (H3)
Proposal for Lane Closures on South Town Centre Boulevard, and the
Closure for Cedarland Drive During Construction**

Dear Mr. Hung:

The Owner's Engineer of YRRTC (OE) has requested KED to investigate various staging options along Cedarland Drive and South Town Centre Boulevard in order to mitigate schedule impacts to the VIVA H3 project. KED has previously provided a justification letter with drawings to support their proposed plan (package dated Aug 13th, 2012). We have received comments from the City concerning the closure period of Cedarland. KED has revised the letter as per the attached updated package.

On behalf of YRRTC, we are forwarding the revised appended package to the City of Markham for review and circulation for the September 25th, 2012 Council's Meeting.

Please feel free to call me at your convenience if you would like to discuss.

Yours truly,

McCormick Rankin, a member of MMM Group

A handwritten signature in blue ink, appearing to read 'Ervin Arden', is written over a horizontal line.

Ervin Arden
Design Build Manager, Owner's Engineer
York Region Rapid Transit Corporation Office

cc P. May, YRRTC
M. Hum, YRRTC
D. Morneau, OE
C. Gauer, OE
N. Chan, OE
W. Taveira, OE
D. Sobik, OE



2012-Aug-30

H3-LTR-KED-MRC-0207-R04

McCormick Rankin Corporation
2655 North Sheridan Way
Mississauga, ON
L5K 2P8

Attention: Mr. Chris Gauer

**Subject: vivaNext | H3 Project
Proposal for Lane Closures on South Town Centre Boulevard, and the Closure for
Cedarland Dr. During Construction**

Dear Mr. Gauer,

KED and the OE have been reviewing various staging options along Town Center Boulevard and Cedarland Drive to present to the City of Markham in order to improve constructability and advance the project schedule. At the moment, utility relocations along Cedarland Drive and Town Center Boulevard have not begun yet and the construction of a condominium by H&W has just begun. There is expected to be a significant volume of construction activities on both STC and Cedarland Dr. between the fall of 2012 and end of 2013, as outlined below.

KED is hereby proposing to close Cedarland Dr. during construction and reduce the number of lanes on Town Center Boulevard to one lane in each direction. During a meeting with Simon Hung (City of Markham) on 2012-07-30, KED was informed that a closure of Cedarland would require Council approval whereas a reduction of lanes on South Town Centre Boulevard would only require a road occupancy permit from the City of Markham. As requested by the OE and the City of Markham, the justification for these closures is as follows:

SOUTH TOWN CENTRE BOULEVARD

There are utility relocations that must happen on both the east and west side of Town Center Boulevard. In order for KED to start work on Town Center Boulevard in spring 2013, the utility companies must work on both sides of Town Center Boulevard simultaneously. If KED is able to subsequently work on road widening construction on both sides of STC concurrently, there is a schedule benefit to the project of approximately 2 months. In order to do this, Town Center Boulevard must be reduced to one lane of traffic in each direction (see attached staging plan). Furthermore, since KED's boulevard construction limits go right up to the property line on both sides of Town Center Boulevard, it will not be possible to build the boulevard on both sides of Town Center Boulevard and maintain pedestrian access. However, we believe that we can complete the road widening on both sides of Town Center Boulevard simultaneously. The boulevard work will have to be completed one side at a time so that pedestrian access can be maintained on the opposite side of the road. KED is proposing to reduce the number of lanes on Town Center Boulevard starting 2013-Apr-01 until



H3-LTR-KED-MRC-0207-R04

2013-Sep-30. Note that utility work will be ongoing through fall and winter 2012 and will require limited lane closures.

CEDARLAND DRIVE

KED's construction activities along Cedarland Dr. will require the removal of sidewalks in order to widen the road by an additional two lanes for the future bus rapidway and to construct two Viva stations. Our traffic staging in this area will also require a permanent lane closure during construction to facilitate the movement of construction vehicles and to store materials. This would eliminate on-street parking and restrict the movement of traffic through Cedarland Dr. KED is proposing to close Cedarland Drive down beginning late October 2012 until the end of February 2013. Following this, KED will request Road Occupancy Permits for specific closures to complete any outstanding work on the canopies. The closure is required for the following reasons:

- 1) Based on the geotechnical reports that KED received for the Cedarland Drive area, we anticipated the soils underneath the canopies to be saturated. As a result, the foundations for the canopies are raft footings instead of piles. Due to the depth of excavation for the westbound Cedarland Drive canopy, there would only be space available for one lane of traffic along Cedarland (see attached). Furthermore, during KED's road widening and canopy construction on the south side of Cedarland, utility relocations and condominium construction will take place simultaneously on the north side of Cedarland. The combination of these activities will generate a lot of construction traffic. We believe that it would be unsafe for motorists and pedestrians to try and cross through this busy construction zone.
- 2) Generally speaking, most of the pedestrian traffic along Cedarland Dr. originates from various bus stops in the Warden and Enterprise area. KED will also be widening the west side of Warden Ave. bridge during the same time that construction along Cedarland Dr. will be taking place this year. In order to begin the bridge widening, KED will be closing off the sidewalk on the west side of Warden Ave (Enterprise to Clegg) and diverting pedestrians over to the east side of Warden Ave. Pedestrians will have to cross the road at the signalized intersection of Clegg Rd. in order to travel westbound. Since the majority of pedestrians will be diverted along Clegg Rd., we believe that there would be a minimal number of pedestrians along Cedarland Dr. Note that there are a couple of visually impaired pedestrians that walk from Warden/Enterprise to Cedarland daily. KED has contacted the visually impaired individuals and they have found alternative bus routes already.
- 3) Traffic westbound along Cedarland Dr. is only generated by motorists travelling southbound along Warden Ave since it is a right in/right out street. Clegg Road is parallel to Cedarland so motorists have an alternative route if Cedarland Dr. is closed.
- 4) The majority of the traffic eastbound along Cedarland Dr. is generated by motorists parking on-street at no cost. However, during construction of the rapidway and canopies, the on-street parking spots will have to be eliminated, which would essentially eliminate most of the traffic on Cedarland Dr.

Based on the above, we believe that the closure of Cedarland Dr. will be safer for the public and that the impact to pedestrians and motorists will be minimal.



H3-LTR-KED-MRC-0207-R04

Kindly forward the above proposal to City of Markham for Council approval. KED would like this closure to be approved at the September Council meeting.

Sincerely,

A handwritten signature in blue ink, appearing to be 'TS' followed by a long horizontal stroke.

Tim Shepherd
Project Manager, vivaNext | H3
905-474-1216 Ext. 1029
tim.shepherd@kiewit.com
TMS/jw/sh

Attachments: H3 - Preferred Design STC-Warden

H3-DWG-F-STR-080512-502-C03

H3-DWG-R-CIV-080403-144-C00 (markup)

