

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF NOVEMBER 21, 2017

Item 6, Report No. 39, of the Committee of the Whole, which was adopted without amendment by the Council of the City of Vaughan on November 21, 2017.

**6 PAST AND FUTURE PRACTICES REGARDING SUB-TERRAIN AND SURFACE TERRAIN
INFRASTRUCTURE
WARD 2**

The Committee of the Whole recommends approval of the recommendation contained in the following report of the Deputy City Manager of Public Works and the Director of Infrastructure Delivery, dated November 7, 2017:

Recommendation

The Deputy City Manager of Public Works and the Director of Infrastructure Delivery recommend:

1. That this report be received for information.

Contribution to Sustainability

N/A

Economic Impact

There are no economic impacts resulting from the findings of this report.

Communications Plan

N/A

Purpose

The purpose of this report is to provide information in response to the motion approved by Council at its meeting on June 5, 2017 that states:

“That staff bring back a report regarding past and future practices regarding sub-terrain and surface terrain infrastructure”.

Background - Analysis and Options

The Infrastructure Delivery Department delivers a variety of infrastructure projects funded through the Capital Budget

The Infrastructure Delivery Department (ID) programs and delivers capital projects associated with underground and above ground infrastructure. Examples of underground infrastructure work includes replacement of existing or construction of new watermains and service connections, storm and sanitary sewers, including lateral connections to public property limits. Examples for above ground infrastructure includes road construction and rehabilitation and replacement of existing or construction of new concrete curb & gutters, sidewalks, active transportation facilities, bridges, culverts, traffic signals and street lights.

In addition, the Department is also responsible to deliver projects associated with existing or new City facilities such as community centres, fire stations and libraries. Notwithstanding, this report focuses on the delivery of the linear infrastructure projects, specifically watermain and road construction.

EXTRACT FROM COUNCIL MEETING MINUTES OF NOVEMBER 21, 2017

Item 6, CW Report No. 39 – Page 2

All procurement activity is carried out in accordance with the Corporate Procurement Policy

Procurement Services procures all projects undertaken by the Department in accordance with the City's Corporate Procurement Policy. Underground and above ground infrastructure projects are currently procured through a competitive bidding process. As per the City's Corporate Procurement Policy, the construction contract is awarded to the lowest compliant bidder.

Staff are currently exploring opportunities with Procurement Services to improve the contractor selection process by pre-qualifying contractors that bid on projects in an effort to reduce the performance issues that may arise with contractors that are the lowest compliant bidder. A pre-qualification process was successfully utilized for the municipal early works contracts associated with the Vaughan Healthcare Centre.

Opportunities to bundle projects are explored to minimize construction impacts to citizens

Currently on roads requiring construction or renewal of underground infrastructure (such as watermain or sewer replacement), the underground work and the final surface work (such as road reconstruction or placement of asphalt) are typically bundled together to minimize disruptions to the community over a multiyear period. The increased overall value of these bundled contracts also has the benefit of attracting larger, more sophisticated companies to bid on the work. In addition, administering only one contract (as opposed to two or more) has proven to be a more efficient use of human resources in contract administration. Lastly, by having a single contractor contractually bound for the warranty period, avoids potential issues of accountability between separate general contractors.

However, a potential adverse result of the current approach to bundling projects is that the road or driveways where the underground infrastructure was installed could settle in the following year. Another downside to bundling work in this manner is that any delays in completing the underground work would result in a delay in completing the above ground work, as was the case in the recent contract for watermain replacement and road rehabilitation on Rossmull Crescent, Kirkhill Place and Crofters Road area.

One option to mitigate this risk is to look at implementing the underground work such as installation of watermain and associated services under one contract and undertake the road rehabilitation work under a separate contract, following the completion of the underground work. This could ensure that the underground services are completed in a timely manner and the road is not disturbed prior to commencing above ground work in the community. With this sequence of scheduling work, while the community will likely be impacted for two or more construction seasons, the scope of work to the general contractor would be more focused on individual asset classes.

Staff continues to explore both bundling the contracts for underground and above ground work as well as having separate contracts on a project by project basis, based on the technical, social and economic factors applicable.

Communication to citizens throughout the various phases are part of the project delivery process

Newsletters are circulated to the Mayor and Members of Council, impacted residents and other stakeholders throughout the various phases of the project. For example, newsletters are first distributed when preliminary design activities (such as topographic survey and field investigations) are taking place within the community. Newsletters are also typically distributed

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF NOVEMBER 21, 2017

Item 6, CW Report No. 39 – Page 3

when the contract has been awarded, providing details of the construction schedule and any other relevant information. Project updates are also provided to the affected residents in the event there are changes or delays to the project timelines presented in the initial newsletter.

These newsletters provide a brief description of the activities being undertaken and the types of potential impacts to the community. The contact information for City staff is also provided on all newsletters should there be any inquiries (See Attachment 2).

Staff are always exploring opportunities to improve processes as well as citizen experience throughout the delivery of infrastructure projects

An issue that frequently arises during the course of construction pertains to damage of private irrigation systems or landscaping features encroaching onto the municipally owned boulevards. While the newsletters note that the City is not responsible for any damage to the private infrastructure that encroaches onto the City's property, the residents may not realize the potential implications and impacts to them until construction takes place. On many occasions, the misunderstanding arises from the lack of awareness as to the extent of their property limits since they also maintain the City's boulevard.

As a result of this feedback, it is suggested that the current newsletters be enhanced to incorporate a schematic of the property limits to better illustrate the delineation of property ownership. In addition, further emphasis be provided to the associated notes in the newsletter identifying City's responsibility (See Attachment 3).

Relationship to Term of Council Service Excellence Strategy Map (2014-2018)

In consideration of the priorities set within the Term of Council Service Excellence Strategy Map, the recommendations in this report support the priority to continue to ensure the safety and well beings of citizens.

Regional Implications

There is no Regional implication resulting from the recommendations of this report.

Conclusion

The Infrastructure Delivery Department delivers a large portion of subsurface and surface infrastructure projects within the City. In the spirit of continuous improvement, staff continues to revise contracts based on the lessons learned from previous projects. Staff will continue to explore opportunities that improve overall project delivery as well as enhance citizen experience throughout the various phases of the project's delivery.

Attachments

1. Member's Resolution
2. Sample Newsletter (current)
3. Sample Newsletter (proposed)

Report prepared by:

Mohan Toor, Manager, Design & Construction (West), ext. 8144

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)

**PAST AND FUTURE PRACTICES REGARDING SUB-TERRAIN AND SURFACE TERRAIN
INFRASTRUCTURE
WARD 2**

Recommendation

The Deputy City Manager of Public Works and the Director of Infrastructure Delivery recommend:

1. That this report be received for information.

Contribution to Sustainability

N/A

Economic Impact

There are no economic impacts resulting from the findings of this report.

Communications Plan

N/A

Purpose

The purpose of this report is to provide information in response to the motion approved by Council at its meeting on June 5, 2017 that states:

“That staff bring back a report regarding past and future practices regarding sub-terrain and surface terrain infrastructure”.

Background - Analysis and Options

The Infrastructure Delivery Department delivers a variety of infrastructure projects funded through the Capital Budget

The Infrastructure Delivery Department (ID) programs and delivers capital projects associated with underground and above ground infrastructure. Examples of underground infrastructure work includes replacement of existing or construction of new watermains and service connections, storm and sanitary sewers, including lateral connections to public property limits. Examples for above ground infrastructure includes road construction and rehabilitation and replacement of existing or construction of new concrete curb & gutters, sidewalks, active transportation facilities, bridges, culverts, traffic signals and street lights.

In addition, the Department is also responsible to deliver projects associated with existing or new City facilities such as community centres, fire stations and libraries. Notwithstanding, this report focuses on the delivery of the linear infrastructure projects, specifically watermain and road construction.

All procurement activity is carried out in accordance with the Corporate Procurement Policy

Procurement Services procures all projects undertaken by the Department in accordance with the City's Corporate Procurement Policy. Underground and above ground infrastructure projects are currently procured through a competitive bidding process. As per the City's Corporate Procurement Policy, the construction contract is awarded to the lowest compliant bidder.

Staff are currently exploring opportunities with Procurement Services to improve the contractor selection process by pre-qualifying contractors that bid on projects in an effort to reduce the performance issues that may arise with contractors that are the lowest compliant bidder. A pre-qualification process was successfully utilized for the municipal early works contracts associated with the Vaughan Healthcare Centre.

Opportunities to bundle projects are explored to minimize construction impacts to citizens

Currently on roads requiring construction or renewal of underground infrastructure (such as watermain or sewer replacement), the underground work and the final surface work (such as road reconstruction or placement of asphalt) are typically bundled together to minimize disruptions to the community over a multiyear period. The increased overall value of these bundled contracts also has the benefit of attracting larger, more sophisticated companies to bid on the work. In addition, administering only one contract (as opposed to two or more) has proven to be a more efficient use of human resources in contract administration. Lastly, by having a single contractor contractually bound for the warranty period, avoids potential issues of accountability between separate general contractors.

However, a potential adverse result of the current approach to bundling projects is that the road or driveways where the underground infrastructure was installed could settle in the following year. Another downside to bundling work in this manner is that any delays in completing the underground work would result in a delay in completing the above ground work, as was the case in the recent contract for watermain replacement and road rehabilitation on Rossmull Crescent, Kirkhill Place and Crofters Road area.

One option to mitigate this risk is to look at implementing the underground work such as installation of watermain and associated services under one contract and undertake the road rehabilitation work under a separate contract, following the completion of the underground work. This could ensure that the underground services are completed in a timely manner and the road is not disturbed prior to commencing above ground work in the community. With this sequence of scheduling work, while the community will likely be impacted for two or more construction seasons, the scope of work to the general contractor would be more focused on individual asset classes.

Staff continues to explore both bundling the contracts for underground and above ground work as well as having separate contracts on a project by project basis, based on the technical, social and economic factors applicable.

Communication to citizens throughout the various phases are part of the project delivery process

Newsletters are circulated to the Mayor and Members of Council, impacted residents and other stakeholders throughout the various phases of the project. For example, newsletters are first distributed when preliminary design activities (such as topographic survey and field investigations) are taking place within the community. Newsletters are also typically distributed when the contract has been awarded, providing details of the construction schedule and any other relevant information. Project updates are also provided to the affected residents in the event there are changes or delays to the project timelines presented in the initial newsletter.

These newsletters provide a brief description of the activities being undertaken and the types of potential impacts to the community. The contact information for City staff is also provided on all newsletters should there be any inquiries (See Attachment 2).

Staff are always exploring opportunities to improve processes as well as citizen experience throughout the delivery of infrastructure projects

An issue that frequently arises during the course of construction pertains to damage of private irrigation systems or landscaping features encroaching onto the municipally owned boulevards. While the newsletters note that the City is not responsible for any damage to the private infrastructure that encroaches onto the City's property, the residents may not realize the potential implications and impacts to them until construction takes place. On many occasions, the misunderstanding arises from the lack of awareness as to the extent of their property limits since they also maintain the City's boulevard.

As a result of this feedback, it is suggested that the current newsletters be enhanced to incorporate a schematic of the property limits to better illustrate the delineation of property ownership. In addition, further emphasis be provided to the associated notes in the newsletter identifying City's responsibility (See Attachment 3).

Relationship to Term of Council Service Excellence Strategy Map (2014-2018)

In consideration of the priorities set within the Term of Council Service Excellence Strategy Map, the recommendations in this report support the priority to continue to ensure the safety and well beings of citizens.

Regional Implications

There is no Regional implication resulting from the recommendations of this report.

Conclusion

The Infrastructure Delivery Department delivers a large portion of subsurface and surface infrastructure projects within the City. In the spirit of continuous improvement, staff continues to revise contracts based on the lessons learned from previous projects. Staff will continue to explore opportunities that improve overall project delivery as well as enhance citizen experience throughout the various phases of the project's delivery.

Attachments

1. Member's Resolution
2. Sample Newsletter (current)
3. Sample Newsletter (proposed)

Report prepared by:

Mohan Toor, Manager, Design & Construction (West), ext. 8144

Respectfully submitted,

Stephen Collins, P.Eng
Deputy City Manager, Public Works

Jack Graziosi
Director of Infrastructure Delivery

Attachment No 1

REPORT NO. 21 OF THE COMMITTEE OF THE WHOLE

Item 27 NEW BUSINESS – SUB-TERRAIN AND SURFACE TERRAIN INFRASTRUCTURE

That staff bring back a report regarding past and future practices regarding sub-terrain and surface terrain infrastructure.

The foregoing matter was brought to the attention of the Committee by Councillor Carella
Council at its meeting on June 5, 2017, adopted the foregoing item without amendment.

NEWSLETTER NO.2

2017 Road Rehabilitation (Ward 2)

April 12, 2017

Starting the week of April 16, 2017, the City of Vaughan will begin road rehabilitation work in several areas, which also includes Wallace Street, Amos Maynard Circle and Fairground Lane, as shown on the map below.

The majority of road and sidewalk work on Wallace Street is expected to be completed by June 30th. The majority of construction on Amos Maynard Circle and Fairground Lane is expected to be completed by mid-July. The entire contract is scheduled to be completed by early September 2017, pending weather conditions and unanticipated circumstances.

PLANNED CONSTRUCTION WORK

The scope of work under this Contract will include road rehabilitation and isolated areas of sidewalk and curb replacement. Before the construction begins, the underground utilities, including watermain, gas, hydro and telephone, will be marked to help avoid potential issues when digging.

CONSTRUCTION IMPACT ON RESIDENTS AND TRAFFIC

- Roads will remain open and lane restrictions will be put in place to allow construction activities to proceed in a safe and efficient manner.
- Access to private driveways will be impacted at times during the road rehabilitation, curb replacement and associated works.
- Special arrangements for mail delivery will be made if required.
- On-street parking will be affected during certain phases of construction. Please refrain from parking on the street when major road work is underway, such as during asphalt removal or paving operations. The City will provide advance notice to the management of the various businesses on the road when on-street parking will be affected.
- Property owners are reminded that underground systems such as lawn sprinklers, heated driveways and electrical conduits etc. may be within the City-owned boulevard or property limits and may be impacted by the proposed construction work. The City will not be responsible for damage to any privately owned items that are within the City-owned boulevard or property limits (Encroachment By-law no. 244-2005).

The City appreciates your co-operation and patience as we work to renew the infrastructure in your neighbourhood as quickly and efficiently as possible.

QUESTIONS?

Please contact:

City of Vaughan
Infrastructure Delivery
Department

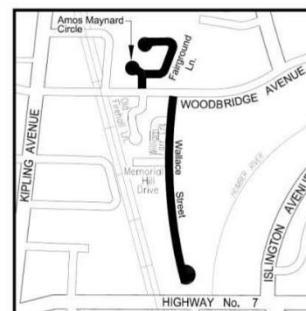
Dave Mason
Municipal Services Inspector
T: 905-832-8585 ext. 8738
E: dave.mason@vaughan.ca

Colin Cassar, C.E.T.
Project Lead
T: 905-832-8585 ext. 8756
E: colin.cassar@vaughan.ca

Office hours
Monday to Friday
8:30 a.m. to 4:30 p.m.

Contractor
Forest Contractors Ltd.

Construction Location



vaughan.ca

 twitter.com/city_of_vaughan
 facebook.com/thecityofvaughan
 youtube.com/thecityofvaughan
 vaughancityblog.ca

NEWSLETTER NO.2

2017 Road Rehabilitation (Ward 2)

April 12, 2017

Starting the week of April 16, 2017, the City of Vaughan will begin road rehabilitation work in several areas, which also includes Wallace Street, Amos Maynard Circle and Fairground Lane, as shown on the map below.

The majority of road and sidewalk work on Wallace Street is expected to be completed by June 30th. The majority of construction on Amos Maynard Circle and Fairground Lane is expected to be completed by mid-July. The entire contract is scheduled to be completed by early September 2017, pending weather conditions and unanticipated circumstances.

PLANNED CONSTRUCTION WORK

The scope of work under this Contract will include road rehabilitation and isolated areas of sidewalk and curb replacement. Before the construction begins, the underground utilities, including watermain, gas, hydro and telephone, will be marked to help avoid potential issues when digging.

CONSTRUCTION IMPACT ON RESIDENTS AND TRAFFIC

- Roads will remain open and lane restrictions will be put in place to allow construction activities to proceed in a safe and efficient manner.
- Access to private driveways will be impacted at times during the road rehabilitation, curb replacement and associated works.
- Special arrangements for mail delivery will be made if required.
- On-street parking will be affected during certain phases of construction. Please refrain from parking on the street when major road work is underway, such as during asphalt removal or paving operations. The City will provide advance notice to the management of the various businesses on the road when on-street parking will be affected.
- **Property owners are reminded that underground systems such as lawn sprinklers, heated driveways and electrical conduits etc. may be within the City-owned boulevard or property limits and may be impacted by the proposed construction work. The City will not be responsible for damage to any privately owned items that are within the City-owned boulevard or property limits (Encroachment By-law no. 244-2005).** Please refer to the schematic on this newsletter illustrating the property limits.

The City appreciates your co-operation and patience as we work to renew the infrastructure in your neighbourhood as quickly and efficiently as possible. Please exercise caution during construction.

2141 MAJOR MACKENZIE DRIVE, VAUGHAN, ON L6A 1T1

QUESTIONS?

Please contact:

City of Vaughan
Infrastructure Delivery
Department

Dave Mason

Municipal Services Inspector
T: 905-832-8585 ext. 8738
E: dave.mason@vaughan.ca

Colin Cassar, C.E.T.

Project Lead
T: 905-832-8585 ext. 8756
E: colin.cassar@vaughan.ca

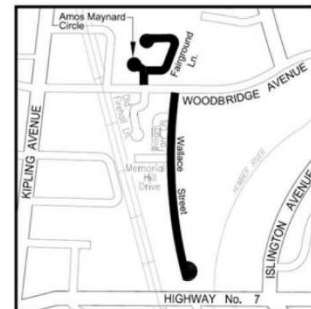
Office hours

Monday to Friday
8:30 a.m. to 4:30 p.m.

Contractor

Forest Contractors Ltd.

Construction Location



vaughan.ca

 twitter.com/city_of_v Vaughan
 facebook.com/thecityofvaughan
 youtube.com/thecityofvaughan
 vaughancityblog.ca

