TO: 
CHAIR AND MEMBERS 
CIVIC WORKS COMMITTEE 
MEETING ON OCTOBER 6, 2015 

FROM: 
JOHN BRAAM, P.ENG. 
MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER 
AND 
GEORGE KOTSIFAS, P. ENG. 
MANAGING DIRECTOR, DEVELOPMENT & COMPLIANCE SERVICES AND CHIEF BUILDING OFFICIAL 

SUBJECT: 
WINTER MAINTENANCE FOR UN-ASSUMED SUBDIVISIONS 

RECOMMENDATION 
That, on the recommendation of Managing Director, Environmental & Engineering Services and City Engineer and Managing Director, Development & Compliance Services and Chief Building Official, the following actions BE TAKEN with respect to Winter Maintenance for un-assumed subdivisions: 

a) the Standard Subdivision Agreement Template BE REVISED to provide the option for Developers, at their expense, to provide winter maintenance of un-assumed roads, at the sole discretion of the City; 

b) Civic Administration BE AUTHORIZED to process administrative amendments to existing Subdivision Agreements, for Developers requesting the option, at their expense, to provide winter maintenance of un-assumed roads, at the sole discretion of the City; and 

c) Civic Administration BE AUTHORIZED to undertake all additional administrative acts necessary to effect these recommendations. 

PREVIOUS REPORTS PERTINENT TO THIS MATTER 
Environment and Transportation Committee - February 10, 2003 - Winter Maintenance for Un-assumed Subdivisions 
Civic Works Committee – February 3, 2015 – Roadway Winter Maintenance Program 

BACKGROUND 
Purpose 
On March 31st 2015, Municipal Council resolved that: 

That the Civic Administration BE REQUESTED to review the current policy associated with snow removal in un-assumed subdivisions and report back with a suggested improved billing model and options for private contacting for snow removal for un-assumed streets, for implementation in the 2015/2016 winter season (2015-T06/D12)
The purpose of this report is to provide Municipal Council with an update on this policy and provide some recommended changes to the process related to snow removal in un-assumed subdivisions.

DISCUSSION

The practice for snow removal in un-assumed subdivisions has evolved over time. In October of 1992, Municipal Council passed the following direction:

That, on the recommendation of the City Engineer, the follow actions be taken with respect to the ploughing and sanding of roads within unassumed subdivisions, commending with the 1992/1993 season, namely:

That the City Engineer BE DIRECTED to assess any charges for winter control in unassumed subdivisions to the appropriate subdivider/developer at a rate sufficient to recover all direct and indirect costs to the Municipality, including a 5% administrative fee;

That subdividers and/or developers who request the City to maintain roads within unassumed subdivisions BE ADVISED of the City’s policy with respect to such maintenance, and provided with comparative statistics from the years 1991 and 1992;

That the City’s position whereby it will not maintain sidewalks in unassumed subdivisions, leaving the responsibility of such maintenance to the subdivider, BE REITERATED; and

That the City Engineer BE REQUESTED to track all costs related to the ploughing and sanding of roads in unassumed subdivisions for statistical purposes, and to similarly track the costs of any repairs to City equipment from damage caused by the ploughing and sanding of these unassumed roadways.

The key point of this recommendation is that developers still had the option of undertaking maintenance in unassumed subdivisions. The City would maintain them if so requested.

In December of 2002, Civic Administration was requested by Municipal Council to report to the Environmental and Transportation Committee (ETC) with suggestions/options on how to improve roadway snow removal services for residents living in un-assumed subdivisions. Occasionally, the City received complaints regarding snow removal in un-assumed areas that were managed by the developer.

Assumption of the municipal works in subdivisions can take on average, 3 to 8 years. At the time, developers were responsible for providing winter maintenance of roads in un-assumed subdivisions at the developer’s cost. Upon request, the City agreed to contract with the subdivider for winter maintenance services of un-assumed roads.

With mounting dissatisfaction from some affected homeowners and given the extent of the City involvement required in providing winter maintenance service for selected un-assumed subdivisions, it was recommended that the City undertake a more consistent role in the provision of winter maintenance.
In February of 2003, Municipal Council passed the following direction:

That, on the recommendation of the General Manager of Environmental Services and City Engineer, provisions BE INCLUDED in new Subdivision Agreements requiring that subdividers, at their expense, contract the City to provide winter maintenance of unassumed roads commencing two years following the issuance of the Certificate of Conditional Approval.

Having the City undertake the winter roadway maintenance in un-assumed subdivisions, provided for direct City control over the quality of the maintenance so that all citizens receive equal treatment.

Since the aforementioned direction, all Subdivision Agreements include provisions that require the developer to enter into a contract with the City starting two (2) years following the issuance of a Certificate of Conditional Approval by which the City will undertake winter road maintenance at the developer’s expense at. (Note: A Certificate of Conditional Approval is issued by the Development Services to notify the Building Division that municipal services have been constructed, inspected and are operational for use so that permit may be issued).

Maintenance Obligations and Level of Service

Road safety is the top priority of the City of London’s Winter Maintenance Program for roadways and sidewalks, keeping these facilities safe and passable for pedestrians and motorists, with a primary focus on emergency and transit vehicles. The City of London maintains roadways in accordance with the Provincial Minimum Maintenance Standards for Municipal Highways (MMS), Regulation 239/02. This Provincial regulation under the Municipal Act specifies minimum maintenance standards for roads, bridges, luminaries, road shoulders and signs, including the maintenance related to snow removal. Sidewalk quality standards are a separate standard which is approved by Council.

The City has a 24/7 response team equipped with; 68 pieces of road plowing equipment, 25 road salt/sanders and 41 sidewalk plows. The response team maintains the City’s 3,555 kms of roadway; 1,475 kms of sidewalk; 720 cul-de-sacs; and 2,100 bus stops.

Winter Maintenance Cost Issues

Civic administration met with representatives from the local development industry who expressed a desire among some developers to revert back to the previous procedure whereby the developer maintained their own un-assumed roads during the winter months.

Some members of the development community indicated that they felt restricted by the requirement to contract the City for winter maintenance services due to the cost for these services and perceived response time by City forces to un-assumed roads during a winter storm event.

The billing model for City contracting of winter maintenance is based on the average cost of snow removal for roads on a City-wide basis. Some larger developers that benefit from economies of scale suggest they would have lower winter maintenance costs than the City’s contract billing model if they maintained the roads themselves.

It should be noted that un-assumed streets without the top layer of asphalt can be
subject to additional treatments and monitoring when compared to roadways with the top layer of asphalt.

### Winter Maintenance Costs

<table>
<thead>
<tr>
<th>Year</th>
<th>Costs / km</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010/2011</td>
<td>$8,172.35</td>
<td>$360,503</td>
</tr>
<tr>
<td>2011/2012</td>
<td>$5,402.56</td>
<td>$241,391</td>
</tr>
<tr>
<td>2012/2013</td>
<td>$5,402.56</td>
<td>$206,973</td>
</tr>
<tr>
<td>2013/2014</td>
<td>$8,509.55</td>
<td>$375,111</td>
</tr>
<tr>
<td>2014/2016</td>
<td>$7,607.34</td>
<td>$331,847</td>
</tr>
</tbody>
</table>

*Average number of kilometers of un-assumed road over last 5 years – 44.5 km*

### Billing Models

The current billing model is calculated using actual expenditures for the winter season between November to April for the entire road network, divided by the number of kilometers (km) of roadway. The result is a cost per km which is applied to the number of km’s that the City is asked to maintain on behalf of the developer.

The City prioritizes the winter maintenance schedule based on the type of roadway (arterial, collector, local), posted speed and annual average daily traffic on a given section of road, meaning that local roads in un-assumed subdivisions are cleared 16-24 hours following the end of a 10 cm snowfall event.

As requested, Civic Administration undertook a review of alternative billing models.

A second billing model method would be to use the Ontario Municipal Benchmarking Initiative (OMBI) cost per lane km which is a provincially recognized financial model.

A third method could be developed based on the estimated costs of a contracted grader plow and incorporating the average usage which would reflect plowing only and preclude treatments of sand/salt.

The development industry has suggested that by allowing the use of private contractors, the private contractor may provide better response times locally and likely undertake winter maintenance before the City forces typically could.

The following are examples are methods that could be applied to an invoice following the 2014/2015 winter period.

### Winter Maintenance for Un-assumed Subdivisions – Billing Options

<table>
<thead>
<tr>
<th>Current Model</th>
<th>Option B</th>
<th>Option C</th>
<th>Option D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual cost for roadway winter control from November 2014 to April 2015</td>
<td>OMBI cost per km represents the annual cost from Jan-Dec. For a spring 2015 invoice the 2013 OMBI is available for use. This would not reflect the current cost incurred for that season.</td>
<td>Estimate: $245/hr (hired grader) x 100hr approximate season use + $8,800 standby / 50km 'beat' size x 15 (average deployment)</td>
<td>Contractor can utilize own resources for snow removal. There would be no need to utilize City resources and overhead.</td>
</tr>
<tr>
<td>$7,607.34 per km</td>
<td>$6,758 per km</td>
<td>$9,990 per km</td>
<td>$0</td>
</tr>
</tbody>
</table>

City staff has encountered challenges in providing winter maintenance on un-assumed roads with active construction activities from new home construction due to difficulties
experienced in maneuvering though the amount of construction traffic (i.e. delivery trucks, trailers, …etc.) parked along the roads in these un-assumed subdivisions.

While there are different approaches available to billing of winter maintenance costs, a key consideration is to not create a system that is labor intensive to track and manage costs. The City captures winter maintenance costs at the overall network level and does not have the resources or technology to capture costs at the individual city street level.

The current model has been in use for over 20 years and has worked well. The severity of the last number of winter seasons has amplified the cost for a number of larger developers that have a number of un-assumed subdivisions.

As a result of the review, it is recommended that the current practice of the City providing winter maintenance services continue under the current billing model. To provide developers with a greater degree of flexibility, it is recommended that the City consider allowing developers the option to maintain the roads in their respective subdivisions with the exception of when a subdivision is scheduled for assumption over the winter period or where there is a connecting link between assumed and un-assumed parcels. The option would be at the sole discretion of the City.

The City’s concern with private contractors is that a minimum level of service has historically not been met, which has led to the City fielding numerous homeowner complaints. As indicated, the City currently maintains all assumed roads in accordance with the Provincial Minimum Maintenance Standards for Municipal Highways (MMS), Regulation 239/02. Developers would be required to meet those standards. Enforcement of these standards would be carried out by Development Services.

In the event that a developer is found to have not met the prescribed requirements, City forces may be used to rectify the situation. All costs related to remedial work completed on the behalf of the developer would be recovered in accordance with the provisions identified in new/amended Subdivision Agreements and the Subdivision and Development Agreement Security Policy (Chapter 19(18) of City Council Policy Manual).

**Sidewalk Maintenance in Un-assumed Subdivisions**

Sidewalks are installed in sections as each individual home is occupied. However, the sidewalk must be completed in whole with continuous elements and connectivity before the City will complete the assumption process.

There are operational, safety and efficiency challenges to maintaining sidewalks that are not continuous. Under the current Subdivision Agreement format, sidewalk winter maintenance is the sole responsibility of the developer until assumption of the subdivision. It was noted that for some elements of un-assumed subdivisions, like school blocks, continuous and maintained sidewalks are essential for safe pedestrian travel to school for students.

The City will not be pursuing any revisions to this aspect of winter maintenance. Development Services will continue to work with developers to enforce agreement clauses on a complaint driven basis with consideration to progress of the build-out within the development. As an educational component for new home buyers, it would be beneficial to include an item with respect to winter maintenance activities, responsibilities and homeowner expectations when developing future homeowner’s
Civic administration recommends that the City continue the practice of providing winter maintenance services under contract based on the current billing model. To provide the development community with operational flexibility, it is recommended that the City consider allowing developers the option to maintain the roads in their respective subdivisions with the exception of when a subdivision is scheduled for assumption over the winter period or where there is a connecting link between assumed and un-assumed parcels. The option would be at the sole discretion of the City.

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