Proposed Closure of Right-of-Way – Portion of Spadina Crescent and Avenue H South & 11th Street West – Holiday Park Neighbourhood

Recommendation
1. That City Council consider Bylaw No. 9449, The Street Closing Bylaw, 2017 (No. 8); and
2. That City Council consider Bylaw No. 9450, The Street Closing Bylaw, 2017 (No. 9).

Topic and Purpose
This report is to obtain approval for two road closures including a portion of the intersection of 11th Street West and Avenue H South (Holiday Park neighbourhood) and a portion of Spadina Crescent West between Gordie Howe Bridge and the 1300 Block of Spadina Crescent West (Holiday Park neighbourhood).

Report Highlights
1. Public Safety Canada conducted a “Critical Infrastructure Resiliency Analysis” of the Water Treatment Plant (WTP). The assessment suggests that a road closure will enable the WTP to enhance security by enclosing the facility with a perimeter fence, restricting traffic in and out of the facility.
2. Closure of Spadina Crescent would reduce short cutting traffic through adjacent residential neighbourhoods and facilitate the upcoming Meewasin Valley pathway expansion.
3. An evaluation of the impacts on adjacent roadways was completed and traffic calming measures are recommended.
4. Travel and emergency response times to the Rural Municipality of Corman Park (RM) southwest of the City will have minimal impact from the closures.

Strategic Goal
This report supports the Strategic Goal of Moving Around by providing improvements for the safety of all road users (pedestrians, cyclists, and drivers), and helps provide a great place to live, work, and raise a family.

This report also supports the Strategic Goal of Quality of Life by supporting the corporate priority of life safety initiatives within the city, and providing improvements at the WTP to reduce the risk of accidental or planned intrusions.

Background
During the WTP expansion (2012 to 2014), the intersection of Avenue H and 11th Street was closed for over two and a half years.
A March 8, 2016 report was submitted to the Standing Policy Committee on Transportation entitled ‘South West Roadway Network Improvements’ outlining the need to undertake an overall planning study of the roadway network in the southwest portion of the city.

On November 14, 2016, a report was provided to the Standing Policy Committee on Transportation also entitled ‘South West Roadway Network Improvements’, which determined the closure of the intersection of Avenue H and 11th Street to have minimal traffic impacts on surrounding roadways.

Report

WTP Security and Operations - Removal of Public Roadway
The WTP is designated as critical infrastructure for the City of Saskatoon, as it is vital to public health and the economy of the Saskatoon region. The WTP serves over 300,000 residents including 35,000 customers outside the city limits, and is the largest in the province. Operations have been upgraded and expanded over the last 10 years to encompass all three corners of the Avenue H and 11th Street intersection. The southwest portion consists of a maintenance shop, and the plant itself is located on both sides of Avenue H, with extensive infrastructure underneath the roadway conjoining the plant.

In conjunction with the City, Public Safety Canada conducted a “Critical Infrastructure Resiliency Analysis” of the Water and Wastewater Treatment Plants. The assessment suggests that a road closure will enable the WTP to enhance security by enclosing the facility with a perimeter fence, restricting traffic in and out of the facility. The proposed Avenue H and 11th Street restrictions are illustrated in Attachment 1.

Spadina Crescent – Motorized Vehicle Restriction
Spadina Crescent south of Avenue H is an arterial roadway carrying approximately 600 vehicles per day in the summer and 220 vehicles per day in the winter. To minimize the impact of vehicular shortcutting through Holiday Park neighbourhood due to the closure of Avenue H and 11th Street and address long standing concerns of excessive speeds along Spadina Crescent, a road closure is recommended along Spadina Crescent south of the 1300 Block. The closure will also provide an opportunity for the Meewasin Valley Authority to facilitate their trail expansion plans by constructing a multi-use pathway on the existing roadway between the Sanitarium site and the Gordie Howe Bridge.

The proposed Spadina Crescent closure is illustrated in Attachment 2.

The closure of Spadina Crescent will change access to the Queen Elizabeth Power Plant. Currently, three alternatives are available to access the Queen Elizabeth Power Plant, including Spadina Crescent, Dundonald Avenue (via Landfill Access Road) and Hodgson Road. With the closure of Spadina Crescent, two alternatives will remain including Dundonald Avenue (either in its existing location or realigned) and Hodgson Road as outlined in Attachment 3.
Traffic Impacts on adjacent roadways
The impact of the proposed closures on the surrounding road network has been evaluated and is shown in Attachment 4. In the short term, the following measures will be implemented to mitigate the impacts on adjacent roadways:

1. Installation of a guide sign on the southbound approach to the intersection of 17th Street and Avenue H indicating to turn right to access Circle Drive South.
2. Installation of traffic calming devices, such as a curb extension, at the intersection of 16th Street and Avenue H, and a centre median at the intersection of 15th Street and Avenue H.
3. Revise the traffic signals at the intersection of 11th Street and Avenue P to promote the eastbound left-turn movements from 11th Street onto Avenue P.

Additional improvements are also being considered along 11th Street West and will be presented in a subsequent report. Long term, extending 17th Street along the abandoned railway right-of-way from Avenue P to 11th Street will assist in reducing the volume of traffic along 11th Street West by shifting traffic patterns through alternate routes.

Travel Time and Emergency Response Assessment
To assess the impact of closing Spadina Crescent on travel times to the RM, a travel time assessment was completed to compare various routes from the Central Business District. The results of the assessment are included in the table below.

<table>
<thead>
<tr>
<th>Start / End Point</th>
<th>Route</th>
<th>Distance (km)</th>
<th>Travel Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start: 22nd Street / 1st Avenue</td>
<td>22nd Street – Idylwyld Freeway – Lorne Avenue – Circle Drive – Valley Road</td>
<td>12</td>
<td>12 11</td>
</tr>
<tr>
<td></td>
<td>22nd Street – Circle Drive – Valley Road</td>
<td>11</td>
<td>15 14</td>
</tr>
<tr>
<td>End: Valley Road / Hodgson Road</td>
<td>22nd Street - 4th Avenue – 19th Street – Avenue H – Spadina Crescent – Hodgson Road (TR 362)</td>
<td>8.5</td>
<td>16 15</td>
</tr>
<tr>
<td></td>
<td>22nd Street – Highway 7 – Hodgson Road</td>
<td>18.5</td>
<td>24 23</td>
</tr>
</tbody>
</table>

The assessment indicates that, for the sample route, two alternate routes have shorter travel times than Spadina Crescent.

A review of the impact to emergency response to both the RM and the Queen Elizabeth Power Plant was conducted and concluded that the proposed closures will not have an impact on emergency response to the RM as Valley Road is currently the preferred route. The impact on emergency response times to the Queen Elizabeth Power Plant is outlined in Attachment 5. Saskatoon Fire Department (SFD) has responded to 9 incidents at the Queen Elizabeth Power Plant since 2009. SFD responds from various fire halls depending on the nature of the emergency. Currently, initial response for a Level 1 alarm is dispatched from Fire Hall #1 and uses Spadina Crescent to access the Queen Elizabeth Power Plant, with an average response time of 7 minutes. With the closure of Spadina Crescent, initial response will be dispatched from Fire Hall #2 via Valley Road, increasing the response time by less than 2 minutes. The response route
for a rescue truck from Fire Hall #6 would not change.

Street Closing Bylaw
To complete this closure, the Administration requires City Council to approve Bylaw No. 9449, The Street Closing Bylaw, 2017 (No. 8), and Bylaw No. 9450, The Street Closing Bylaw, 2017 (No. 9), Attachments 6 and 7.

Options to the Recommendation
There are two options available to City Council:
1. Not to proceed with the road closures. The Administration does not recommend this option as closure of the intersection within the WTP would enable the City to improve the security of the facility and therefore further protect citizens throughout the Saskatoon region.
2. Proceed with restricting Avenue H and 11th Street but not Spadina Crescent. The Administration does not recommend this option as closing the intersection of Avenue H and 11th Street by itself will promote shortcutting of regional traffic through a residential neighbourhood.

Public and/or Stakeholder Involvement
Since 2015, various discussions have been held with SaskPower, Meewasin Valley Authority, RM and emergency services. A summary of the public and/or stakeholder involvement is included in Attachment 8.

A resident survey was completed to gauge the level of support for the proposed restrictions. The level of support varies among the residents surveyed and the results are presented in Attachment 9.

Communication Plan
City Council’s direction will be shared with the residents impacted by the decision using several methods: the City website, the Community Association, direct mail-out and other forums (i.e. community newsletter) as appropriate.

Financial Implications
The estimated cost to close the roadways and enhance security at the WTP is $1.6 Million. This work will be funded from the Water Utility through the Water Works Capital Projects Reserve.

Environmental Implications
The overall impact of the recommendations on traffic characteristics, including the impacts on greenhouse gas emissions, has not been quantified at this time.

CPTED Implications
There are no CPTED implications for the closure of 11th Street West and Avenue H South.

The closure to vehicles of Spadina Crescent between the 1300 block of Spadina
Crescent West and the Gordie Howe Bridge may have CPTED implications. A CPTED review will be completed as part of Meewasin’s design of their trail extension.

**Other Considerations/Implications**

There are no policy or privacy considerations or implications.

**Due Date for Follow-up and/or Project Completion**

If approved, a further report will be required to approve a budget adjustment to fund the closures and the security enhancements at the WTP. It is anticipated that the roadways will be closed and the security enhancements will be constructed in late 2017.

**Public Notices**

Public Notice is required for consideration of this matter, pursuant to Section 3 of Policy No. C01-021, The Public Notice Policy. The following notice was provided:

- Advertised in *The StarPhoenix* and *Bridges* on the weekend of May 13, 2017 (Attachment 10);
- Posted on the City Hall Notice Board on May 12, 2017;
- Posted on the City of Saskatoon website on May 12, 2017; and
- Notices were mailed to the adjacent land owners on May 10, 2017.

**Attachments**

1. Proposed Road Closure – Portions of Spadina Crescent West, 11th Street and Avenue H
2. Proposed Road Closure - Spadina Crescent West
3. Access to Queen Elizabeth Power Plant
4. Traffic Impacts Review
5. Emergency Response Time
6. Bylaw No. 9449, The Street Closing Bylaw, 2017(No. 8)
7. Bylaw No. 9450, The Street Closing Bylaw, 2017(No. 9)
8. Public and Stakeholder Engagement Summary
9. Resident Survey Results
10. Copy of Public Notice

**Report Approval**

Written by: Dave LeBoutillier, Senior Transportation Engineer, Transportation
            Jay Magus, Engineering Section Manager, Transportation
Reviewed by:  Angela Gardiner, Director of Transportation
           Reid Corbett, Director of Saskatoon Water
Approved by:  Jeff Jorgenson, General Manager, Transportation & Utilities
             Department

Council DL – Prop CI ROW – SW Roads