SUMMARY

This staff report is about a matter for which this Community Council has delegated authority from City Council to make a final decision.

City Council, at its meeting of July 11, 12 and 13, 2012 adopted, as amended, the Public Works and Infrastructure Committee Item PW16.4 entitled, "On-Street Electric Vehicle Charging Stations - Pilot Project." In so doing, Council approved the installation of five curb-side electric vehicle charging stations within the public right-of-way as part of a one-year pilot study. As noted in the aforementioned report, Transportation Services will fund the procurement, installation and operation of these charging stations with a grant from the Toronto Atmospheric Fund (TAF). Following installation, Transportation Services staff will monitor and evaluate the pilot project and report back to the Public Works and Infrastructure Committee with its findings.

This report outlines the traffic and parking by-law amendments required to implement the parking areas associated with this pilot project.
RECOMMENDATIONS

The Acting Director, Transportation Infrastructure Management, Transportation Services recommends that Toronto and East York Community Council:

1. Approve the designation of electric vehicle charging station parking areas for the exclusive use of electric vehicles while actively engaged in charging their batteries, for the duration of the one-year pilot project, at the following locations:
   a. Ed Mirvish Way, east side, from a point 24.0 metres north of King Street West to a point 11.0 metres further north (2 spaces);
   b. Elizabeth Street, east side, from a point 9.0 metres south of Foster Place to a point 5.5 metres further south (1 space); and
   c. Wellington Street West, south side, from a point 37.0 metres east of Clarence Square to a point 11.0 metres further east (2 spaces).

2. Authorize and direct the appropriate City officials to take the necessary action to give effect thereto, including the submission of the necessary Bills, to implement the amendments to the parking and parking machine regulations generally as set out in Appendix B attached to this report.

Financial Impact

As noted, City Council, at its meeting of July 11, 12 and 13, 2012 adopted, as amended, Item PW16.4 entitled, "On-Street Electric Vehicle Charging Stations - Pilot Project." A Toronto Atmospheric Fund grant in the amount of $65,000.00 will fund all costs associated with the On-street Electric Vehicle Charging pilot project, with no net impact to the Transportation Services Division Capital budget.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

City Council, at its meeting of July 11, 12 and 13, 2012 adopted, as amended, the staff report dated May 24, 2012 entitled, "On-Street Electric Vehicle Charging Stations - Pilot Project" (Item PW16.4), and approved, amongst other things, the installation of five curb-side electric vehicle charging stations within the public right-of-way as part of a one-year pilot study.
COMMENTS

Selection Criteria for EV Charging Station Locations

The following key criteria were utilized in the selection of the candidate sites for the placement of EV charging stations:

- **Downtown core:** A location in the downtown area not far from City Hall would aid the monitoring of the chosen site(s) and would be most likely to generate higher utilization of the EV charging stations during the pilot.

- **Avoid Major Roads:** With typical rush-hour parking restrictions, major arterial roads would not be good candidates for charging stations.

- **'No Parking' Areas:** Curb-side 'No Parking' areas would be considered prime candidate locations in order to avoid using existing pay-and-display areas, if parking can be safely accommodated.

- **Pay-and-Display Locations:** For an existing pay-and-display area to be considered, a space at the end of the parking area is required in order to enhance visibility and to allow for proper delineation of the space for EVs only.

- **Charging Station Connection:** A space in close proximity to an existing hydro pole is required for convenient connection to the charging station. This will ensure that electrical installation costs are minimized.

- **Power Source:** Sufficient 220V electrical power is required in close proximity to the vehicle charging station. The higher costs associated with stringing power between poles or from the nearest intersection will be avoided.

- **Placement:** Charging station equipment located within a sidewalk/boulevard area should not interfere with the accessibility requirements of pedestrians or those with a disability and adhere to the objectives of the City's Accessibility and Vibrant Streets Guidelines.

Using the aforementioned criteria for EV site selection, the following locations have been chosen and are recommended for the purposes of the pilot (See also EV Charging Station Locations (Map) – Appendix A):

a. Ed Mirvish Way, east side, from a point 24.0 metres north of King Street West to a point 11.0 metres further north (2 spaces);
b. Elizabeth Street, east side, from a point 9.0 metres south of Foster Place to a point 5.5 metres further south (1 space); and
c. Wellington Street West, south side, from a point 37.0 metres east of Clarence Square to a point 11.0 metres further east (2 spaces).
It should be noted that originally an electric vehicle charging spot was identified on Victoria Street just south of Dundas Square in the report entitled, "On-Street Electric Vehicle Charging Stations - Pilot Project" (Item PW16.4), adopted, as amended by Council on July 11, 12 and 13, 2012. However, due to a recent request to have a construction staging area established, at this location, to accommodate the construction of a residential/commercial building, the electric vehicle charging spot was no longer feasible. It was therefore decided that this lost spot could be accommodated at the Ed Mirvish Way location as an additional spot.

**Delineating EV Parking Spaces**

All EV charging station locations will be identified by a combination of regulatory signs, pavement markings, and supporting advisory signage. Signage and poles (as required) will advise of regulatory limits of the EV charging parking area and further note that it is intended for the exclusive use of EVs while charging.

**Regulatory Amendments**

The site-specific by-law amendments required to implement the EV parking areas at the locations noted above are detailed in Appendix B of this report, with the new regulations taking effect upon installation of the EV charging stations and regulatory signage and subsequent to receipt of set fine approval.

**Compliance and Enforcement**

Enforcement is a key to ensuring that an EV on-street parking space is not occupied by an unauthorized vehicle. Since EV charging on-street is a new operating condition in the City, ensuring that only EVs have unimpeded access to the charging stations will require the creation of new offences, fixed fines and set fines for related offences. Approval of the Senior Regional Judge, Ontario Court of Justice, will be sought before enforcement can be carried out.

City Council, at its meeting of July 11, 12 and 13, 2012 adopted, as amended, Public Works and Infrastructure Committee Item PW16.4 entitled, "On-Street Electric Vehicle Charging Stations - Pilot Project." In so doing, authorized the City Solicitor, in consultation with the Acting General Manager of Transportation Services, to make application to the Senior Regional Justice of the Ontario Court of Justice for set fines of $60.00 with respect to the offences created by the pilot program.

Chapter 950 (Traffic and Parking) and Chapter 910 (Parking Machines) of the City of Toronto Municipal Code must be amended to accommodate EVs while charging in a designated area. The required amendments are listed in Appendix B.
Follow-up Monitoring and Evaluation

Following the completion of the one-year pilot program, the Transportation Services Division will report back to the Public Works and Infrastructure Committee with the results of its monitoring and evaluation efforts.

CONTACTS

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Fax: (416) 392-4808
E-mail: psabo@toronto.ca

SIGNATURE

________________________________________
Nazzareno A. Capano, P.Eng.
Acting Director, Transportation Infrastructure Management

ATTACHMENTS

Appendix A - EV Charging Station Locations
Appendix B - Amendments to Toronto Municipal Code
Appendix A

EV Charging Station Locations
Appendix B

Amendments to Toronto Municipal Code
Chapter 910 - Parking Machines
Chapter 950 - Traffic and Parking

Deletions:

Chapter 910 - Parking Machines

Delete from Schedule I, the following:

<table>
<thead>
<tr>
<th>Highway</th>
<th>Side Parking</th>
<th>Between</th>
<th>Hours (daily as indicated below)</th>
<th>Fee/Time Limit</th>
<th>Maximum Parking Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elizabeth Street</td>
<td>Both</td>
<td>Dundas Street West and Hagerman Street</td>
<td>8:00 a.m. to 9:00 p.m., Mon. to Sat.; 1:00 p.m. to 9:00 p.m. Sun.</td>
<td>$4.00 for 1 hour</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

Chapter 950 - Traffic and Parking

Delete from Schedule XIII: No Parking, the following:

<table>
<thead>
<tr>
<th>Highway</th>
<th>Side</th>
<th>Between</th>
<th>Prohibited Times and/or Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed Mirvish Way</td>
<td>East</td>
<td>King Street West and Pearl Street</td>
<td>Anytime</td>
</tr>
<tr>
<td>Wellington Street West</td>
<td>South</td>
<td>Clarence Square and University Avenue</td>
<td>Anytime</td>
</tr>
</tbody>
</table>

Delete from Schedule XIV: No Stopping, the following:

<table>
<thead>
<tr>
<th>Highway</th>
<th>Side</th>
<th>Between</th>
<th>Prohibited Times and/or Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wellington Street West</td>
<td>South</td>
<td>Clarence Square and a point 80 metres west of Blue Jays Way</td>
<td>7:30 a.m. to 9:30 a.m., Mon. to Fri., except public holidays</td>
</tr>
</tbody>
</table>

Insertions:

Chapter 910 - Parking Machines

Insert in Schedule I, Parking Machines, the following:

<table>
<thead>
<tr>
<th>Highway</th>
<th>Side Parking</th>
<th>Between</th>
<th>Hours (daily as indicated below)</th>
<th>Fee/Time Limit</th>
<th>Maximum Parking Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elizabeth Street</td>
<td>West</td>
<td>Dundas Street West and Hagerman Street</td>
<td>8:00 a.m. to 9:00 p.m., Mon. to Sat.; 1:00 p.m. to 9:00 p.m. Sun.</td>
<td>$4.00 for 1 hour</td>
<td>3 hours</td>
</tr>
</tbody>
</table>
Insert in Schedule II, Parking Machine Locations Designated as Electric Vehicle Charging Stations, the following:

<table>
<thead>
<tr>
<th>Highway</th>
<th>Side Parking</th>
<th>Between</th>
<th>Hours (daily as indicated below)</th>
<th>Fee/Time Limit</th>
<th>Maximum Parking Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elizabeth Street</td>
<td>East</td>
<td>Dundas Street West and Foster Place</td>
<td>8:00 a.m. to 9:00 p.m., Mon. to Sat.; 1:00 p.m. to 9:00 p.m. Sun.</td>
<td>$4.00 for 1 hour</td>
<td>3 hours</td>
</tr>
<tr>
<td>Elizabeth Street</td>
<td>East</td>
<td>A point 14.5 metres south of Foster Place and Hagerman Street</td>
<td>8:00 a.m. to 9:00 p.m., Mon. to Sat.; 1:00 p.m. to 9:00 p.m. Sun.</td>
<td>$4.00 for 1 hour</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

Chapter 950 - Traffic and Parking

Insert in Schedule XIII: No Parking, the following:

<table>
<thead>
<tr>
<th>Highway</th>
<th>Side</th>
<th>Between</th>
<th>Prohibited Times and/or Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed Mirvish Way</td>
<td>East</td>
<td>King Street West and a point 24 meters north</td>
<td>Anytime</td>
</tr>
<tr>
<td>Ed Mirvish Way</td>
<td>East</td>
<td>A point 35 metres north of King Street West and Pearl Street.</td>
<td>Anytime</td>
</tr>
<tr>
<td>Wellington Street West</td>
<td>South</td>
<td>Clarence Square and a point 37 metres east.</td>
<td>Anytime</td>
</tr>
<tr>
<td>Wellington Street West</td>
<td>South</td>
<td>A point 48 metres east of Clarence Square and University Avenue.</td>
<td>Anytime</td>
</tr>
</tbody>
</table>

Insert in Schedule XIV: No Stopping, the following:

<table>
<thead>
<tr>
<th>Highway</th>
<th>Side</th>
<th>Between</th>
<th>Prohibited Times and/or Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wellington Street West</td>
<td>South</td>
<td>Clarence Square and a point 37 metres east.</td>
<td>7:30 a.m. to 9:30 a.m., Mon. to Fri., except public holidays</td>
</tr>
<tr>
<td>Wellington Street West</td>
<td>South</td>
<td>A point 48 metres east of Clarence Square and a point 80 metres west of Blue Jays Way.</td>
<td>7:30 a.m. to 9:30 a.m., Mon. to Fri., except public holidays</td>
</tr>
</tbody>
</table>
Insert in Schedule XLIV: Electric Vehicle Charging Station Parking, the following:

<table>
<thead>
<tr>
<th>Highway</th>
<th>Side Parking</th>
<th>Between</th>
<th>Hours (daily as indicated below)</th>
<th>Maximum Period Parking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed Mirvish Way</td>
<td>East</td>
<td>A point 24 metres north of King Street West and a point 11.0 metres further north</td>
<td>Anytime</td>
<td>3 hours</td>
</tr>
<tr>
<td>Elizabeth Street</td>
<td>East</td>
<td>A point 9.0 metres south of Foster Place and a point 5.5 metres further south</td>
<td>Anytime</td>
<td>3 hours</td>
</tr>
<tr>
<td>Wellington Street West</td>
<td>South</td>
<td>A point 37.0 metres east of Clarence Square and a point 11.0 metres further east</td>
<td>Anytime</td>
<td>3 hours</td>
</tr>
</tbody>
</table>