TO: Mayor and Council

FROM: Jim Keech, President and CEO, Utilities Kingston

RESOURCE STAFF: Allen Lucas, Utilities Engineer, Utilities Kingston

DATE OF MEETING: October 5, 2010

SUBJECT: Endorsement of the 2008-2009 Annual Progress Report and the Final Report for the Ravensview Wastewater Treatment Plant Upgrades

EXECUTIVE SUMMARY:
The attached Annual Progress Report and Final Report have been prepared to comply with the reporting requirements for the Canada Strategic Infrastructure Fund agreement based on the March 31 fiscal year end.

RECOMMENDATION:
That Council endorse the 2008-2009 Annual Progress Report and the Final Report for the Ravensview Wastewater Treatment Plant for submission under the Canada Strategic Infrastructure Fund (CSIF).

AUTHORIZING SIGNATURES:

ORIGINAL SIGNED BY PRESIDENT & CEO, UTILITIES KINGSTON
J.A. Keech, President and CEO, Utilities Kingston

ORIGINAL SIGNED BY CHIEF ADMINISTRATIVE OFFICER
Gerard Hunt, Chief Administrative Officer

CONSULTATION WITH THE FOLLOWING COMMISSIONERS:

<table>
<thead>
<tr>
<th>Commissioner</th>
<th>Department</th>
<th>Consultation Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cynthia Beach</td>
<td>Sustainability &amp; Growth</td>
<td>N/A</td>
</tr>
<tr>
<td>Terry Willing</td>
<td>Community Services</td>
<td>N/A</td>
</tr>
<tr>
<td>Denis Leger</td>
<td>Transportation, Properties &amp; Emergency Services</td>
<td>N/A</td>
</tr>
<tr>
<td>Jim Keech</td>
<td>President and CEO, Utilities Kingston</td>
<td>✓</td>
</tr>
</tbody>
</table>

(N/R indicates consultation not required)
OPTIONS/DISCUSSION:

Utilities Kingston proceeded with the upgrades to the Ravensview Wastewater Treatment Plant to provide for improved wastewater treatment and additional capacity for treatment at the plant. The community will benefit from this extremely important upgrade of the plant.

The Annual Progress Report for the Canada Strategic Infrastructure Fund (CSIF) program was prepared by June 30, 2009. However, as a result of changes to the federal Steering Committee Members, the report was not reviewed until the fall. At that time some revisions were made and further review and endorsement by the Steering Committee was needed before reporting to Council. The completion of the Final Annual Report is essential for the project to be closed out formally by the federal funding partners.

Within the reports to Infrastructure Canada, the funded project budget estimate of $95,384,285, remains unchanged from the 2007/08 report. The funded portion, as per the agreement, was reviewed with respect to the award of contract to Pomerleau Ontario Inc. and was considered to fairly represent the defined works. The total projected budget for the engineering and construction remains within the $116,325,000 approved budget envelope, which includes electrical co-generation, on-site biosolids storage, staff costs and allowances for furnishings and equipment to be purchased outside the construction contract. These items were not in the funding agreement with Canada and are not reported on in the attached as there is no funding at this time. Of note, the critical point in the project was achieving Substantial Completion of the construction contract, that was achieved on March 27, 2009, almost 6 months ahead of the planned schedule.

In June 2005, the Province of Ontario announced project funding of $25,000,000. These funds were previously advanced in full to the City of Kingston. Staff continues to seek funding assistance from other sources for those components not currently funded.

EXISTING POLICY/BY LAW: N/A

NOTICE PROVISIONS: N/A

ACCESSIBILITY CONSIDERATIONS: N/A

FINANCIAL CONSIDERATIONS: N/A

CONTACTS:
Jim Keech, President and CEO, Utilities Kingston 613-546-1181, Extension 2217
Allen Lucas, Utilities Engineer, Utilities Kingston 613-546-1181, Extension 2250

OTHER CITY OF KINGSTON STAFF CONSULTED:
Lana Foulds, Financial Planning Coordinator, Financial Services

EXHIBITS (DISTRIBUTED SEPARATELY):
Exhibit A: Ravensview Wastewater Treatment Plant – Annual Progress Report 2008-2009
Exhibit B: Ravensview Wastewater Treatment Plant – Final Annual Report 2009-2010
RAVENSVIEW WASTEWATER TREATMENT PLANT
FORMERLY
RAVENSVIEW WATER POLLUTION CONTROL PLANT

2008-2009
ANNUAL PROGRESS REPORT
INTRODUCTION

The Ravensview Wastewater Treatment Plant, formerly referred to as a Water Pollution Control Plant, provides sewage treatment for the central and eastern portions of the City of Kingston. Prior to this upgrade the facility provided enhanced primary treatment. The treated water from the plant met the current quality limits for secondary biological treatment plants. In 1992 when the last expansions were planned, the first phase was approved and constructed which improved the treatment at the time and provided additional capacity for growth. The second phase of the project, which included plans for secondary treatment, was deferred to the future.

In 2003 Utilities Kingston and the City of Kingston sought financial assistance from various levels of government to upgrade the treatment capabilities of the plant. In July 2003, the federal government announced it would participate in funding of upgrades to the plant with up to $25,000,000 available. The funded project components are depicted on the site plan included in Appendix A.

PROJECT PROGRESS TO DATE

Detailed Project Status

Utilities Kingston, through the design engineering team lead by J.L. Richards and Associates, Kingston Office commenced the fiscal year having completed in 2008/09 about $19,000,000 worth of construction and ongoing engineering quality control, inspection and contract administration.

In the current fiscal year, approximately $18,891,942 was expended in construction, engineering quality control, inspection and contract administration.

Specifically, the following components’ estimated percent completion are:

- Site services - 95% complete
- Rock removal - 100% complete,
- Grit removal system - 100% complete,
- Primary clarifier upgrades - 100% complete,
- Biological Aerated Filters - 100% complete,
- Digester complex and new Digester - 100% complete, and
- Biosolids management - 100% complete.
Overall, at fiscal year end, the project is estimated to be approximately 98% constructed with about 98% of the overall construction budget expended or allocated. All areas, except the site servicing are complete and rectifying minor deficiencies.

**Environmental Issues**

The Ontario Ministry of Environment issued an updated Certificate of Approval for Ravensview dated 11 January 2005. The plant operated in compliance with the Certificate of Approval. Of note, the Biological Aerated Filters (BAF) were under commissioning beginning early September 2008, with the secondary treatment process fully started up on February 20th, 2009 following a final three day testing. On the monthly average table and as shown on the graphs, the resulting improvements in the reduction of the 5 day Carbonaceous Biological Oxygen Demand (CBOD5) and Suspended Solids is evident. The level of phosphorus remains relatively constant, however the change from using only ferric chloride for removal to relying on the biological uptake in the BAF has resulted in a significant reduction of chemical addition. Much cleaner effluent water has enabled a reduction in chlorine used for disinfection. A summary of the annual and monthly averages are presented in the following tables and figures.

<table>
<thead>
<tr>
<th></th>
<th>Concentration in Effluent</th>
<th>Total Loading from Effluent</th>
<th>2008 Annual Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBOD/5</td>
<td>25.0 mg/l</td>
<td>2,375 kg/d</td>
<td>12.2 mg/l 911 kg/d</td>
</tr>
<tr>
<td>Suspended Solids</td>
<td>25.0 mg/l</td>
<td>2,375 kg/d</td>
<td>10.9 mg/l 790 kg/d</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>1.0 mg/l</td>
<td>95 kg/d</td>
<td>0.46 mg/l 32.2 kg/d</td>
</tr>
<tr>
<td>Total Chlorine Residual</td>
<td>0.04 mg/l</td>
<td>No occurrences over 0.04</td>
<td></td>
</tr>
<tr>
<td>E. Coli</td>
<td>200 counts/100 mL (monthly geometric mean density)</td>
<td></td>
<td>40.3</td>
</tr>
<tr>
<td>ph</td>
<td>maintained between 6.0 to 9.5</td>
<td></td>
<td>7.32</td>
</tr>
</tbody>
</table>

Table 1
Effluent Limits/ Results
<table>
<thead>
<tr>
<th></th>
<th>2008 Limits</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg. Flow cu.m/day</td>
<td>95,000</td>
<td>76,214</td>
<td>73,962</td>
<td>88,793</td>
<td>95,550</td>
<td>75,617</td>
<td>67,399</td>
<td>66,896</td>
<td>62,426</td>
<td>55,188</td>
<td>57,507</td>
<td>60,598</td>
<td>81,757</td>
</tr>
<tr>
<td>Max. Flow cu.m/day</td>
<td>193,000</td>
<td>127,802</td>
<td>116,878</td>
<td>121,381</td>
<td>135,933</td>
<td>101,722</td>
<td>111,385</td>
<td>93,968</td>
<td>82,916</td>
<td>86,197</td>
<td>117,070</td>
<td>88,372</td>
<td>148,522</td>
</tr>
<tr>
<td>Average CBOD5 mg/L</td>
<td>25.0</td>
<td>16.8</td>
<td>26.8</td>
<td>17.7</td>
<td>13.8</td>
<td>18.0</td>
<td>10.8</td>
<td>6.6</td>
<td>14.8</td>
<td>7.3</td>
<td>5.2</td>
<td>3.8</td>
<td>5.0</td>
</tr>
<tr>
<td>Average CBOD5 Loading kg/d</td>
<td>2375</td>
<td>1280</td>
<td>1978</td>
<td>1573</td>
<td>1314</td>
<td>1361</td>
<td>725</td>
<td>442</td>
<td>921</td>
<td>405</td>
<td>299</td>
<td>227</td>
<td>409</td>
</tr>
<tr>
<td>Average SS mg/L</td>
<td>25.0</td>
<td>11.8</td>
<td>13.1</td>
<td>14.6</td>
<td>9.8</td>
<td>12.4</td>
<td>17.4</td>
<td>18.7</td>
<td>12.6</td>
<td>9.5</td>
<td>3.9</td>
<td>3.5</td>
<td>3.4</td>
</tr>
<tr>
<td>Average SS Loading kg/d</td>
<td>2375</td>
<td>900</td>
<td>970</td>
<td>1300</td>
<td>933</td>
<td>938</td>
<td>1172</td>
<td>1252</td>
<td>787</td>
<td>521</td>
<td>225</td>
<td>211</td>
<td>277</td>
</tr>
<tr>
<td>Average TP mg/L</td>
<td>1.0</td>
<td>0.40</td>
<td>0.34</td>
<td>0.62</td>
<td>0.27</td>
<td>0.34</td>
<td>0.33</td>
<td>0.39</td>
<td>0.48</td>
<td>0.58</td>
<td>0.41</td>
<td>0.74</td>
<td>0.57</td>
</tr>
<tr>
<td>Average TP Loading kg/d</td>
<td>95</td>
<td>30</td>
<td>25</td>
<td>55</td>
<td>26</td>
<td>26</td>
<td>22</td>
<td>26</td>
<td>30</td>
<td>32</td>
<td>23</td>
<td>45</td>
<td>46</td>
</tr>
<tr>
<td>Chlorine Used kg as Cl2</td>
<td>6128</td>
<td>4482</td>
<td>4834</td>
<td>5255</td>
<td>5401</td>
<td>8776</td>
<td>8624</td>
<td>7304</td>
<td>6357</td>
<td>6261</td>
<td>5847</td>
<td>4440</td>
<td></td>
</tr>
<tr>
<td>Dosage mg/L</td>
<td>1.02</td>
<td>2.09</td>
<td>1.76</td>
<td>1.83</td>
<td>2.30</td>
<td>4.34</td>
<td>4.16</td>
<td>3.77</td>
<td>3.84</td>
<td>3.51</td>
<td>3.22</td>
<td>1.75</td>
<td></td>
</tr>
</tbody>
</table>

Table 2

Monthly Average Effluent Flows, Concentration and Loadings
The new Certificate of Approval will require future changes in monitoring and analysis. Of particular note is the requirement for the plant to comply with the testing for “non-toxic effluent” with respect to chlorine and ammonia in the water discharged to the receiving waters, six months after the secondary treatment process is commissioned. Compliance testing for this will commence no later than August 2009.

At present, chlorine is used for disinfecting the treated water and then a chemical is added to dechlorinate immediately before discharge. This process will be continued after the upgrades are complete as approved. Removal of ammonia is done within the biological secondary treatment processes and therefore will not be required to be met until after completion of the upgrades. Both of these requirements will be confirmed through regular biological testing, initially on a monthly basis.

Infrastructure Canada has determined, in accordance with subsection 20(1) of the Canadian Environmental Assessment Act (CEAA), that the impact of this project on the environment is not likely to cause significant environmental effects if it proceeds under the following conditions:

- Requirements for mitigation and monitoring specified in the report must be implemented in a timely manner.
- All other environmental permits and licenses must be obtained in a timely manner and work must be carried out in accordance with any conditions specified therein.

Site specific mitigation measures during the construction phase are implemented in accordance with the submitted Environmental Protection Plan. The contractor is responsible for the environmental management requirements for those areas under its control. These requirements have been monitored and regular reviews are completed by Utilities Kingston Environmental Protection Lead, the contractor and the engineering consultant for contract administration purposes.

There have been no issues of significance to date, with minor concerns with respect to blasting and mud tracking off the site. Blasting efforts were strictly controlled which mitigated concerns. Ongoing efforts are being undertaken by the contractor to minimize offsite tracking of materials.

**Benefits**

The Ravensview Wastewater Treatment Plant sewage works have functioned well over the years with basic improvements. This is testimony to the ability of the staff and functionality of the original engineering designs. The basis and support for the need to plan and implement upgrades now is, as defined by the Ontario Ministry of Environment (MOE) primary purpose of plant Certificates of Approval, to:

1. Protect human health and the environment by preventing potential harmful effects.
2. Require a facility to conform to generally accepted engineering practices with the potential to operate reliably.
3. Provide minimum requirements for compliance with Ministry standards as set out in acts, regulations, policies, objectives and guidelines.
4. Outline minimum responsibilities of facility owners and operators.

In addition to these direct benefits, the project as it is constructed will have additional benefits to the local municipal economy. There will be significant direct employment of construction trades during the latter part of 2006 through to completion in 2009 with up to 100 or more trades people and labourers on site. There is an expectation that while some of the workers will be local, a large number will be from out of town and will require a range of support and services.

Inclusion in 2004 of the design of combined heat and electrical power generation facilities, commonly called cogeneration, with the methane gas from the treatment plant as a fuel source will position Kingston well in reducing greenhouse gas emissions. The design was completed and includes a 375 kilowatt generator that is capable of blending the digester gas with piped natural gas as the primary use of the digester gas. During times when the unit is out of service for maintenance, the digester gas will be used as a fuel to the boilers or in emergency flared off.

Other Issues or Risks

There are no other issues at this time which should affect the original timelines for completion and budget for the project.

Budget Update

The budget for the project is currently estimated at $116,325,000 in 2006 dollars, updated from the $102,842,000 (based on 2004 dollars). The pre-tender estimate for the construction contract was reported in the 2005/06 Annual Report as $95,000,000, including contingencies, specific construction allowances and taxes. The construction tender received and accepted was $83,100,000 including contingencies, allowances and taxes. The balance of the project budget includes money already expended for the Environmental Assessment, geotechnical studies, hydrogeological studies, archaeological studies, ecological works, preliminary engineering design, pilot testing, detailed engineering design, pre-approved equipment drawings, allowances for equipment supplied outside of Contract UK E06-01, permit fees and staff costs.

Throughout the project the value will continue to be monitored and assessed as required to address any unforeseen conditions or other necessary changes such as inflation, fuel increases and other construction cost increases.

The audit report to March 31, 2009, provided under separate submission was completed by KPMG. There were no issues noted.

The planned and actual expenses for the project, as funded under the Canada Strategic Infrastructure Fund are broken down in the following table.
<table>
<thead>
<tr>
<th>Project Component</th>
<th>Total</th>
<th>Forecast Expenditures 2008-09</th>
<th>Actual Expenditures ending 2009/03/31</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct Biological Aerated Filters for Secondary Treatment</td>
<td>$54,901,604</td>
<td>$10,056,650</td>
<td>$11,630,357</td>
<td>-$1,573,707</td>
</tr>
<tr>
<td>Construction of Pumping Station</td>
<td>$5,712,855</td>
<td>$1,020,000</td>
<td>$1,638,276</td>
<td>-$618,276</td>
</tr>
<tr>
<td>Construction of One Additional Digester</td>
<td>$14,631,479</td>
<td>$4,100,000</td>
<td>$1,660,211</td>
<td>$2,439,789</td>
</tr>
<tr>
<td>Construct Septage Receiving Facility</td>
<td>$33,500</td>
<td>$33,350</td>
<td>$50,000</td>
<td>-$16,650</td>
</tr>
<tr>
<td>Improve Chlorination/ De-Chlorination</td>
<td>$1,845,923</td>
<td>$60,000</td>
<td>$506,638</td>
<td>-$446,638</td>
</tr>
<tr>
<td>Headworks and Grit Removal</td>
<td>$7,518,758</td>
<td>$1,320,000</td>
<td>$1,031,023</td>
<td>$288,977</td>
</tr>
<tr>
<td>Primary Clarifiers</td>
<td>$5,637,818</td>
<td>$1,700,000</td>
<td>$1,296,142</td>
<td>$403,858</td>
</tr>
<tr>
<td>Boilers and Heat Exchangers</td>
<td>$5,002,500</td>
<td>$550,000</td>
<td>$1,075,382</td>
<td>-$525,382</td>
</tr>
<tr>
<td>Audit, Communication and Evaluation</td>
<td>$100,000</td>
<td>$25,000</td>
<td>$3,913</td>
<td>$21,087</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$95,384,285</strong></td>
<td><strong>$18,865,000</strong></td>
<td><strong>$18,891,942</strong></td>
<td><strong>$26,942</strong></td>
</tr>
</tbody>
</table>

Table 3  
Project Funding Breakdown
During 2008/09, the planned expenditures, as per the funding agreement, were allocated for construction and engineering quality assurances and testing. Additionally, some direct equipment purchases by Utilities Kingston for incorporation into the project were completed.

The funded project components were reviewed by the Project Steering Committee. The estimates were not adjusted during the year as the allocations were believed to fairly represent the proportional costs within this agreement as compared with the overall project costs. Given the current state of construction and current financial review, the Project Steering Committee will need to review the allocations and the method of assigning by proportion the costs and consider reallocating.

An extended tendering period resulted in a later than anticipated construction start. This was the main factor in the projected expenditures being larger than the actual expenditures for the year. The aggressive construction schedule and projected cash flow provided by the contractor to Utilities Kingston will result in the target for the coming year to make up for this.

Currently the project overall is within the City of Kingston’s expected budget for the project. The project includes activities not funded under the agreement, enclosed biosolids storage/handling facility and electrical co-generation. The overall project target budget was increased in 2006 to $116,325,000 to account for supply and construction cost increases.

Risk Management

An Environmental Protection Plan, including emergency response measures and risk management has been developed based upon the Canadian Environmental Assessment Screening Report. The plan incorporates Standard Operating Procedures for the plant and requirements within the construction contract. In addition, the selected contractor will be required to provide a site specific environmental management plan which will include measures as specified in Section 01561. This was issued June 8, 2006 to the Steering Committee and a copy provided to Environment Canada. In addition, the Ravensview Environmental Protection Plan has been provided for reference to the City of Kingston Environmental Division and the District Office of the Ontario Ministry of Environment.

COMMUNICATIONS ACTIVITIES COMPLETED DURING THE FISCAL YEAR

The following table provides a list of all communications referencing the project site in Fiscal Year 2007-08. Copies of all press releases and a summary of the news articles are included in Appendix B.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 3, 2008</td>
<td>Editorial Page - “Rosen’s record as mayor unparalleled for last 50 years”</td>
<td>The Kingston Whig-Standard</td>
<td>Michael Davies - Kingston</td>
</tr>
<tr>
<td>April 10, 2008</td>
<td>Local News - “City dumps more sewage into lake”</td>
<td>The Kingston Whig-Standard</td>
<td>Jennifer Pritchett</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
<td>Location</td>
<td>Party</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------------------------------------------------------</td>
<td>-------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>April 12, 2008</td>
<td>Editorial Page - “Credit where credit’s due”</td>
<td>The Kingston Whig-Standard</td>
<td>Gerry Barber - Kingston</td>
</tr>
<tr>
<td>April 12, 2008</td>
<td>Editorial Page - “Each mayor leaves a legacy”</td>
<td>The Kingston Whig-Standard</td>
<td>Brian Evoy - Kingston</td>
</tr>
<tr>
<td>April 12, 2008</td>
<td>Front - “Speculators give Kingston a look”</td>
<td>The Kingston Whig-Standard</td>
<td>Frank Armstrong</td>
</tr>
<tr>
<td>May 9, 2009</td>
<td>Local News - “City projects get ‘green’ thumbs up”</td>
<td>The Kingston Whig-Standard</td>
<td>Frank Armstrong</td>
</tr>
<tr>
<td>May 13, 2008</td>
<td>Local News - “Work expected to affect east-end water”</td>
<td>The Kingston Whig-Standard</td>
<td>Jennifer Pritchett, Staff Reporter</td>
</tr>
<tr>
<td>June 2008</td>
<td>“Ravensview Water Pollution Control Plant”</td>
<td>Ontario Construction News, pp 1, 3-5</td>
<td>Catherine Stutt, Freelance Journalist</td>
</tr>
<tr>
<td>July 12, 2008</td>
<td>News – “skilled workers needed: experts; Shortage may stall projects, affect economy;”</td>
<td>The Kingston Whig-Standard</td>
<td>Frank Armstrong, Staff Reporter</td>
</tr>
<tr>
<td>July 12, 2008</td>
<td>Editorial/Opinion - “Moderation and balance make for a livable Kingston; COLUMN;”</td>
<td>The Kingston Whig-Standard</td>
<td>Ed Smith</td>
</tr>
<tr>
<td>July 29, 2008</td>
<td>News - “Council to make a wish list of city projects: Priority setting session tonight at City Hall”</td>
<td>The Kingston Whig-Standard</td>
<td>Jordan Press, Staff Reporter</td>
</tr>
<tr>
<td>September 4, 2008</td>
<td>News - “Kingston should update infrastructure: watchdog; Green technology may improve health of Great Lakes”</td>
<td>The Kingston Whig-Standard</td>
<td>Jennifer Pritchett, Staff Writer</td>
</tr>
<tr>
<td>October 10, 2008</td>
<td>Local News – “Milliken withstands sharp criticism; Incumbent MP refuses to engage in heated debate with his opposition; ELECTION 2008;”</td>
<td>The Kingston Whig-Standard</td>
<td>Jennifer Pritchett, Staff Writer</td>
</tr>
<tr>
<td>October 11, 2008</td>
<td>Editorial/Opinion - “Kingston votes, 2008; Whig-Standard editorial writers assess the local candidates and their campaigns;”</td>
<td>The Kingston Whig-Standard</td>
<td></td>
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<tr>
<td>October 11, 2008</td>
<td>News – “Wild art”</td>
<td>The Kingston Whig-Standard</td>
<td></td>
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<tr>
<td>October 24, 2008</td>
<td>Editorial/Opinion - “Ontario must keep investing; OUR VIEW”</td>
<td>The Kingston Whig-Standard</td>
<td></td>
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<tr>
<td>Date</td>
<td>Event</td>
<td>Location</td>
<td>Party</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>October 31, 2008</td>
<td>Editorial/Opinion – “Kingston’s waterfront is a jewel in the rough; BLUE RIBBON PANEL”</td>
<td>The Kingston Whig-Standard</td>
<td>Diana Davis Duerkop</td>
</tr>
<tr>
<td>November 22, 2008</td>
<td>Editorial/Opinion - “What Milliken must deliver; OUR VIEW”</td>
<td>The Kingston Whig-Standard</td>
<td></td>
</tr>
<tr>
<td>December 13, 2008</td>
<td>News - “Residents savour the smell of success; City’s $116M retrofit of sewage plant nears completion”</td>
<td>The Kingston Whig-Standard</td>
<td>Jennifer Pritchett, Staff Writer</td>
</tr>
<tr>
<td>December 27, 2008</td>
<td>News - “Out with the old in ‘08”</td>
<td>The Kingston Whig-Standard</td>
<td>Ian McAlpine, Staff Reporter</td>
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<tr>
<td>February 19, 2009</td>
<td>“Attempt to soften Kingston’s sewage image gets the plunger treatment from council”</td>
<td>Kingston EMC</td>
<td>Bill Hutchins</td>
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<td>February 21, 2009</td>
<td>News – “Council debates name of expanded Ravensview treatment plant”</td>
<td>The Kingston Whig-Standard</td>
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<tr>
<td>March 2009</td>
<td>“Pomerleau’s project surpasses all expectations”</td>
<td>The Ontario Construction Report, pp OCR10-11</td>
<td>Matthew Desrosiers</td>
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<tr>
<td>March 5, 2009</td>
<td>Editorial/Opinion – “Let’s make Kingston the eco-friendlier city”</td>
<td>The Kingston Whig-Standard</td>
<td>Dorothy Hector - Councillor</td>
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<td>March 5, 2009</td>
<td>News – “Environmental watchdog to speak at university”</td>
<td>The Kingston Whig-Standard</td>
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<tr>
<td>March 17, 2009</td>
<td>Editorial/Opinion – “Yes, let’s call things what they really are”</td>
<td>The Kingston Whig-Standard</td>
<td>Ray Bergstrom – Kingston</td>
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<td>March 27, 2009</td>
<td>News – “How the City chooses construction projects”</td>
<td>The Kingston Whig-Standard</td>
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<td>March 27, 2009</td>
<td>News – “Ravensview update”</td>
<td>The Kingston Whig-Standard</td>
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Table 4
Media Coverage
Agreement Steering Committee Meetings

Project Steering Committee Meeting was held on March 4, 2008. The meeting was to review the requirements and actions for the Committee. A copy of the agenda and meeting minutes are included in Appendix C.

Additional Information

Select photographs for the project have been provided with the regular monthly project updates. Included in Appendix D are some additional photographs which depict the overall progress of construction over the period.

Through the initial construction phase there has been no significant public concerns raised. Concerns were raised by three properties located east of the site with respect to low water wells. A thorough investigation by the hydrogeological engineer and the City’s claims adjuster, both of which determined the very dry summer of 2007, not this project, was the cause of the issues. A fourth property, located south of the BAF, had raised concerns with poor water quality attributing the problem to the construction. Temporary bottled water was provided while this was thoroughly investigated. As the evidence did not conclusively refute the claim Utilities Kingston offered to assist in rectifying the solution. The City of Kingston, being the property owner, sought a sign off from the lease-holder, who had identified a supplier of a filtration system which they believed would resolve the problem. However, the leaseholder has refused to sign off on the matter and has failed to proceed with any further action. Material tracking off-site by construction vehicles was raised again and is being controlled, as required by the contractor.

The “Construction Public Liaison Committee” has been formed, consisting of local residents who participated previously during the Environmental Assessment. The mandate of this group of concerned individuals is to provide front line communications back to the City for issues concerning residents. To date this group of individuals, who dedicate their own time to assist, are instrumental in ensuring the local residents are able to speak freely on issues and also provide good contacts.

Through the project website and newsletters, the public have been invited to subscribe to an e-mail list to receive updates. This tool has worked well in providing short notice and timely information to a broader audience.

The Municipal Council members are kept informed of the works through briefs and progress reports. The progress report is reviewed by the project’s Senior Management Team who meet generally on a monthly basis to track issues.
Appendices

The following appendices form part of the Annual Progress Report:

- Appendix A: Project maps
- Appendix B: Press releases
- Appendix C: Management Committee Meeting Agenda and Minutes
- Appendix D: Project photos
CSIF 2008-09 Annual Report
Appendix A

Project Work Components Plan
When I was out of the country earlier this year, I learned that the Whig-Standard had published the results of a quasi-public opinion poll and that Mayor Harvey Rosen had received an approval rating in the 30-per-cent range. As they say in the vernacular: "Hello! You've got to be kidding. Get real buddy!"

Since Rosen became mayor, he has overseen the following projects:

A final resolution to the question of what to do about Block D after 40 years. The new condos and apartments will contribute millions in taxes to the city every year.

A partial resolution to the Marine Museum and dry dock situation and a new wharf to service large tour ships.

Federal contributions to Fort Henry that, to date, equal $11 million.

A new police station with a value of $35 million.

A renovated Ravensview sewage plant and auxiliary storm sewage storage sites; value, $130 million.

A multiplex complex; value, $35 million.

The K&P walking and biking trail, including a $1 million underpass under all six lanes of Highway 401 at Highway 38; value, $2 million.

the Springer Market Square renovation and ice pad; value, $7 million

the K-Rock Centre; value, $42 million

the Grand Theatre renovation; value, $17 million.

Total: About $280 million. That's right: $280 million in capital spending and only a four-per-cent tax increase for this year.

Of course, the mayor had assistance. His first council was very supportive of the major projects it adopted. The current council has more of a stewardship approach. Glen Laubenstei, our city's chief administrative officer, and his staff should also be commended for managing these significant projects.

We were fortunate that Rosen's relationship with our provincial member of Parliament, John Gerretsen, and our federal member, Peter Milliken, helped to bring hundreds of millions into our various civic projects.

Every team needs a leader, and I will go on record that Rosen's performance as mayor is unparalleled for the last 50 years. My approval rating is 80 per cent.
Runoff from this past winter's heavy snowfall has forced the city to send nearly four times more untreated sewage into local waterways in the first three months of 2008 than for all of 2007.

So far this year, the City of Kingston has discharged roughly 345 million litres of raw waste, compared to 89 million in 2007.

Most of that untreated sewage went directly into Lake Ontario, from which Kingston and dozens of other municipalities draw their drinking water.

This spike in water pollution comes just weeks after the city announced that 2007 was the best year in its history, in terms of the amount of raw waste the municipality regularly sends into area watercourses.

Jim Keech, president and chief executive officer of Utilities Kingston, blamed the increase in 2008 on the sharp rise in snowfall this winter and the relatively fast melt in March.

"Last year was the best year we'd had in our history and I guess what we need to do is see where we come out for the remainder of this year," he said. "The weather can change us drastically."

However, it's difficult to determine exactly what impact snowfall had on Kingston's sewer system because there is no way of knowing precisely how much snow fell on the city this winter. Currently, there is no official collection of snowfall data within the city.

The City of Kingston tracks rainfall, but Environment Canada's nearest weather station that collects snowfall data is in Hartington, located roughly a 20-minute drive north of the municipality.

Based on weather data from Hartington, the snowiest winter on record since 1967 was 276.3 centimetres in the winter of 1970-71, compared to 246.5 centimetres so far this year. Last year's total snowfall was 73.8 centimetres. The average snowfall each winter in Hartington is 171.9 centimetres.

Environment Canada is expected to open a weather station in Kingston later this year.

"The amount of snow we've had on the ground this year far exceeds anything we've seen in the last 10 to 15 years maybe," said Keech.

Runoff from roads during heavy rain or during the annual spring melt overloads Kingston's aged sewer system. Its combined sewer pipes, which carry both runoff from roads and raw sewage, aren't able to move the waste to the Ravensview sewage-treatment plant fast enough.

The city's longtime practice of purging the raw waste into the waterways, known as bypassing, is an effort to prevent the refuse from backing up into people's homes and toilets.

Kingston has spent roughly $160 million on known trouble spots in the city's sewer system and has significantly decreased the amount of untreated waste purged from those areas over the past five years.

Keech said that without these upgrades, the volume of untreated waste that would have gone into Lake Ontario this spring because of the heavy snowfall would have been much more.

"Even though we are bypassing, the amount we're bypassing would be quite small compared to what it was before," he said. "The amount is high [this year], but I still think it's positive."

Keech also said the majority of the raw waste Kingston has discharged into waterways this year has come from smaller sewer pipes that weren't monitored before the fall of 2006.

At that time, the city installed new ultrasonic equipment at 11 of the combined sewer manholes that direct the foul liquid into the watercourse. These devices, which cost $10,000 each, have enabled city staff to collect data on the amount of waste going into the waterways that was never before tracked.

As many as 18 other such pipes remain unmonitored.

In an effort to prevent future discharges, Utilities Kingston, which oversees the city's sewers, has now turned its attention to these trouble areas of the system that weren't previously monitored.

Late last month, the province handed down $7.682 million to the City of Kingston to continue the ongoing retrofit work to its sewer system.

The city is also leasing some equipment from Texas that will clean some of Kingston's sewer pipes during the coming year. This clean-up work is anticipated to increase the capacity of some of the city's older pipes.

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I enjoyed Isabel Turner's letter "Let's not give current mayor all the credit" (April 8). She was absolutely right about previous federal and provincial contributions she negotiated, the hard work of the Fort Henry staff and the St. Lawrence Parks Commission, the Ravensview sewage treatment project and all the projects managed and overseen by the Utilities Kingston staff. She gave credit where credit was due.

How quickly some people forget and overlook the dedication and commitments by previous mayors and city councils.

Gerry Barber

Kingston

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Each mayor leaves a legacy

Re: Michael Davies' letter "Rosen's record as mayor unparalleled for the last 50 years" (April 3).

Davies should get his facts straight before giving credit to Mayor Harvey Rosen for the initiatives outlined in his letter. Many of the initiatives Davies lists were accomplished during former mayor Isabel Turner's term in office.

It was Turner who successfully negotiated with MPP John Gerretsen and MP Peter Milliken to secure provincial and federal funding for Fort Henry, the Ravensview sewage treatment plant and the Grand Theatre, to name just a few projects. It was her determination and political savvy in having monthly meetings with the local provincial and federal members that led to the transfer of funds for many projects in Kingston. Turner established an excellent working relationship between these two political offices and city hall, one unparalleled during any previous mayor's term of office.

It was not just Turner, but also her council, that led the way in beginning projects such as the Ravensview upgrade, the new police station, the Market Square project and the Grand Theatre renovations.

So, for Davies to give all the accolades to Rosen is a rewrite of history, and not the true facts. Even his comment on $280 million in capital spending and a four-per-cent tax increase for this year is questionable. What about the funding shortfalls for the K-Rock Centre, the Market Square project and the Grand Theatre project? Who is going to have to pick up those costs? The taxpayers of Kingston will have to do it, and it is unknown how much they will have to pay for these underfunded initiatives. I wonder if Davies will add this to Rosen's legacy?

Each mayor and council leave their legacy to be built upon by the next mayor and council. I hope that, in future, Davies will keep the facts straight, as did the Kingstonians who gave Rosen an approval rating well below 50 per cent in an informal poll.

Brian Evoy
Kingston

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Kingston is entering a "new era of growth," says a national commercial-industrial real estate forecast released this week.

More than $1 billion in public-sector infrastructure and capital projects are anticipated over the next two years. Speculative commercial real estate investment is happening in Kingston for the first time in a decade, and the retail market is exceeding expectations, the report from DTZ Barnicke says.

"That new era of growth is really being driven by the public-sector monies that are being spent in Kingston," said Martin Skolnick, vice-president and associate broker at DTZ Barnicke Eastern Ontario.

Skolnick was referring to money spent on projects such as the renovation of the Grand Theatre, the Ravensview sewage treatment plant upgrade, the construction of the K-Rock Centre and west-end multiplex, market square, the Queen's Centre, and the $100 million in building planned for CFB Kingston.

There's also massive private-sector construction happening at Block D, and two huge retail developments at Dalton Avenue and Division Street.

All this construction makes it easier to sell Kingston to potential investors, said Skolnick, who co-wrote the Kingston portion of the report.

"When companies are looking at locating somewhere, they want to know the municipality doesn't have a huge backlog of infrastructure yet to be paid for because that drives what property taxes will likely look like in the future," he said.

DTZ Barnicke expects construction to continue to boom into 2008 and notes that Kingston and the 401 corridor are seeing some speculative development for the first time in a decade.

The biggest challenge for the future of industrial development in Kingston will be a growing scarcity of serviced, zoned industrial land, the report says.

At the same time, overall demand for investment properties is exceeding supply, with single-tenant retail and new construction retail strips with national tenants in the most demand.

Retail sales grew by an estimated $1.8 billion in 2007, a 4.6-per-cent increase over 2006.

Nonetheless, Skolnick anticipates that it might take some time to fill Kingston's empty big-box retail spaces due to massive recent big-box retail expansion in the west end and a general tightening up of retail expansion across the country.

At the same time, most of the nation's retailers already have a foothold in Kingston.

With the economy slowing, many retailers may not be interested in increasing their presence here, Skolnick said.

"Retailers are pulling back," he said. "They're showing some caution about expansion, so we're finding retail expansion is slowing significantly."

For example, he said, DTZ Barnicke was midway through a fairly large retail deal in downtown Kingston, but the client recently said it wants to wait a few months before continuing.

Regardless, Skolnick expects Kingston's downtown retail market to continue to thrive due to a large amount of new residential construction, including three new apartment buildings at Block D and construction of the Marriot Hotel there and the erection of a new 18-unit apartment building at Bagot and Brock streets.

The Prince George Hotel is also being renovated so that new apartments will be built on its upper floors.

"The residential component of what is happening downtown is very exciting because it just strengthens the core," Skolnick said, explaining that people living downtown tend to shop downtown.

"That's what makes the downtown more vibrant," he said.

Jeff Garrah, CEO of Kingston Economic Development Corp., said he's been telling people the city is entering a new era of growth for the last 18 months.

"I don't think the city has seen this type of growth for a long, long time," Garrah said.

He doesn't believe the same level of public-sector investment is happening in similar-sized cities and expects it will help bring more private-sector investment.

"We are also seeing the pressures of the larger markets getting outrageously expensive," he said. "I think it's our time."
Kingston Whig-Standard (On)

City projects get 'green' thumbs up

Friday, May 9, 2008
Page: 4
Section: Local News
Byline: Frank Armstrong
Illustrations: "[Energy efficient] buildings are one of the cheapest ways to reduce greenhouse-gas emissions," says Anne Auger, vice-president of Leadership in Energy and Environmental Design Canada.

Kingston was lauded as a "green" leader yesterday for spearheading several major environmentally friendly construction projects.

Municipalities have a social and environmental obligation to be leaders in environmental building and design, Anne Auger said.

"It has a direct impact on how the market is going to react," said Auger, vice-president of Leadership in Energy and Environmental Design (LEED) Canada and a member of the Canada Green Building Council, which manages a rating system that recognizes green building attributes.

Auger was speaking to about 100 guests at a breakfast hosted by ELORIN, a regional innovation network.

At least five municipal construction projects have been, or are being built, to LEED standards, although none of them will get a platinum rating, the highest.

The new Kingston Police station attained gold certification, which is the most common.

The K-Rock Centre received silver certification for environmental efforts, such as using a certain percentage of local building materials to avoid extra energy in transportation, low-flow toilets, CFC-free refrigerant and energy-saving light fixtures and providing bicycle racks and showers for employees.

The Ravensview sewage treatment plant upgrade, the west-end multiplex and the new Calvin Park library are all being built to receive silver certifications.

Buildings emit about a third of Canada's greenhouse gas emissions and consume about a third of the energy consumed by the country, Auger said.

"[Energy efficient] buildings are one of the cheapest ways to reduce greenhouse-gas emissions," she said.

The Canada Green Building Council hopes to certify 100,000 green buildings and one million green homes by 2015.

Interest in building to LEED specifications is growing and it helps that building to those standards costs negligibly more than building the traditional way, Auger said, estimating the added cost to do so can be 2.4 per cent or less.

In 2003, there were no LEED-certified buildings in Canada; now there are more than 600, she said. Most are commercial or industrial facilities, but interest is growing in other sectors.

About 32 per cent of LEED structures are office buildings, 21 per cent are local government facilities. About 18 per cent are apartment-style complexes, while 10 per cent are university and college buildings.

Ontario is the leader in LEED buildings, followed by British Columbia, Alberta and Quebec.

There are no LEED guidelines for existing buildings, but that should change in 2009 after the green building council completes a nationwide pilot project involving as many as 300 existing commercial buildings, schools, and government buildings.

"The pilot will help to determine how green Canada's buildings can be," Auger said.

The managers of these buildings will examine how they use energy and they will report this information to the council. The council will use the data to create a benchmark to establish which buildings are the most efficient.

All the information will be shared among the participants, allowing each to figure out how to make his or her own buildings more environmentally friendly.

John Johnson and Debra Krakow are keen to see existing building guidelines introduced to help them make a two-floor renovation of Hotel Dieu Hospital as environmentally friendly as possible.

Johnson is the Dieu's assistant director of planning and facilities while Krakow is the hospital's capital projects manager.

The hospital recently finished a $5-million retrofit to improve its energy efficiency. While the price tag is high, Johnson said the investment is expected to pay for itself in about 11 years.

If there was a LEED certification for existing buildings, the designers of the Dieu renovation would have some universal environmental goals to aim for.

They'll still use LEED standards, but Johnson and Krakow wish there were guidelines for existing buildings as well as for hospitals, which have their own unique environmental challenges.

LEED guidelines do exist for multiple unit residential buildings, campuses and multiple building complexes, leased spaces, and commercial interiors.
but there aren't yet any for hospitals.

Auger said she’s not aware of any such guidelines under development.

To cut down on energy use, the Dieu recently changed 13,500 light bulbs, saving 3,5000 tonnes of greenhouse-gas emissions per year. It is also changing all its taps to electronic ones to save on the copious amounts of water used by the hospital.

As a public health institution that owns 12 downtown buildings and uses a lot of energy, the hospital has a social responsibility to help improve the environment by reducing its energy use, Krakow said.

"It's our mission to promote health care, so creating a healthy environment and not putting pollution into the regional air supply is very important," she said.

Hotel Dieu is currently working with Queen's University engineers on an idea to install what's called a green roof on 28,000 square feet on one of the hospital's buildings.

It would involve covering the entire roof with dense plants.

The cover would keep the building cooler in summer, but it would mainly be used to absorb the hospital's grey water instead of flushing it into the already over-burdened sewage system.

The green patch would also reduce what's called the "island effect," a phenomenon that occurs when the massive amounts of pavement and concrete in cities absorb the sun's heat and make temperatures soar in urban areas.

The increased heat causes people to crank up their air conditioners, puts more pressure on the electrical grid and emits huge amounts of greenhouse gases.

The hospital is also looking at technology for recovering anesthetic gas, which emits up to 1,900 times more greenhouse gases than carbon dioxide.

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Residents in the east end of the city may have
discoloured water or lower pressure for the next two
weeks while new cleaning devices at the Ravensview
sewage plant are tested.

Water may turn red in some households as iron
deposits become stirred up in the system.

The discoloration is temporary, the city says, and
poses no health risk.

Utilities Kingston says residents should simply run
their cold water until it clears and check that the
water is clear before doing laundry or other projects
that may be affected by discoloured water. Residents
may also prefer to keep a pitcher of clear water in the
refrigerator for drinking.

Starting tomorrow, Utilities Kingston will be filling
each of the 11 cells of a new biological aerated filter
at the Ravensview plant to ensure that all connections
are watertight and can be readily sealed if leaks
appear.

The tests require a large amount of water and may
cause some households in the east to have
intermittent, temporary discoloration in their water
or loss of water pressure.

There won't be any disruption in service.

The new filter is part of the $115 million upgrade and
expansion of the plant on the east side of Kingston.
Construction is on schedule for completion in
September 2009.

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City eyes 'green' money

A new provincial grant program announced yesterday may help the City of Kingston retrofit about 40 municipal buildings to save on energy costs.

Ontario's $20-million Municipal Eco Challenge Fund is designed to encourage municipalities to make infrastructure improvements that will conserve energy and reduce greenhouse gas emissions.

The program, part of the province's Go Green program, enables municipalities to apply for grants to subsidize projects that will help cut their energy costs. It focuses on new, innovative technologies that aren't yet commonly used, such as installing LEDs for general office ceiling lighting.

The grants are available to cover as much as 50 per cent of retrofit costs, up to a maximum of $500,000.

Municipalities have until July 2 to apply for the first round of funding.

Paul MacLatchy, the city's director of strategy, environment and communications, said the province's grant money could dovetail well with the city's plan for making its buildings green.

"It's basically to take a look at all of our old buildings and fix them to make them more energy efficient," said MacLatchy. "That project might dovetail well into [the new provincial grant program]."

The city program is expected to cost between $4 million and $5 million.

The hope is that eventually the energy savings would pay the debt incurred to cover the capital costs of the infrastructure improvements.

At one point, the city bandied about the notion that any company doing the infrastructure work would sign a contract guaranteeing savings for the city.

If the city didn't see that drop in expenses, the contractor would cover the shortfall.

A study in 2000 revealed the city spent about $6.1 million on energy and emitted more than 27,000 tonnes of greenhouse gases a year.

Buildings are responsible for one-third of Canada's greenhouse gas emissions and consume roughly one-third of the energy consumed by the country. For that reason, energy efficient buildings are seen as one of the cheapest ways to reduce greenhouse gas emissions.

The city has been lauded as a "green" leader for its commitment to environmentally friendly construction.

All of the city's recent building projects - the K-Rock Centre, the new police station and the Invista multiplex near - are all Leadership in Energy and Environmental Design certified.

The Ravensview water treatment plant, as well as the new Calvin Park library, are also being constructed to receive the LEED certification.
Skilled workers needed: experts; Shortage may stall projects, affect economy;

Saturday, July 12, 2008
Page: 3
Section: News
Byline: BY FRANK ARMSTRONG WHIG-STANDARD BUSINESS REPORTER
Illustrations: Ian MacAlpine

Eastern Ontario must train more than 11,000 new workers between now and 2016 to prevent construction skills shortages that could stall development and hobble the economy if not addressed, an audience in Kingston heard yesterday.

"In my mind, the economy goes as construction goes," George Gritziotis, executive director of the Construction Sector Council, said at a news conference.

The council conducts an annual study to determine future construction labour force needs. A report based on the latest study was released yesterday at the K-Rock Centre before a group that included a number of local labour leaders.

This year's study revealed that about 250,000 skilled construction-sector workers will be required across Canada between now and 2016 to meet demand and replace the country's aging workforce.

Almost 74,000 workers will be needed in Ontario over the next eight years, the study said.

Gritziotis urged all corners of the construction sector, such as training institutions, industry, and labour unions to work together to address looming shortages.

Boilermakers, construction managers and supervisors, crane operators, heavy equipment operators and mechanics, ironworkers and welders are now in the highest demand in Ontario.

Throughout the next eight years, other tradespeople will become scarcer. For example, available sheet metal workers and elevator constructors and mechanics will be hard to find and employers will have to attract additional workers from out of province, the study said.

The 29 other trades examined by the council will be limited in availability by the emergence of large projects, industrial maintenance requirements and short-term increases in demand.

While construction labour markets should be able to meet demand requirements, new projects that were not announced before the completion of the study could affect market balance, Gritziotis said.

For example, a major nuclear power plant is planned at Darlington that will require large numbers of skilled labourers. Other large energy projects are also on the way.

Conversely, a wnturn in the U. S. economy could dampen construction investment here.

Meanwhile, demand in other provinces, such as Calgary and Alberta, may lure workers out of Ontario, although labourers in this province don't tend to relocate elsewhere in large numbers, the report said.

Major new infrastructures have already started to push Ontario's construction industry workforce to its limits, the report said.

Those big Ontario projects include $100 million in utilities work, such as a gas-fired energy plant in Sarnia and a nuclear plant in Tiverton. They include automotive projects, such as upgrades to several automotive plants, mining investments, wind farms, and nine ethanol plants.

In eastern Ontario, a large electric power generation plant is planned for Ottawa. Ethanol plants are planned for Johnstown and Odessa. In Brockville, 3M has just finished a factory where Shell will build a plant of its own.

Lyreco Canada is also building a distribution centre here in Kingston.

Also, several million dollars' worth of institutional and municipal construction is underway or soon to begin at Queen's University, Kingston General Hospital, Royal Military College, and at the Ravensview water treatment plant.

Engineering construction - such as roads and bridge work - is expected to grow slowly at 1.2 per cent per year in eastern Ontario in the medium term, but will pick up speed in the long term to an average 2.4-per-cent growth, the study said.
Industrial construction growth in eastern Ontario is expected to slip in 2008 and 2009 as most manufacturing and transportation and warehousing projects wrap up, but will recover by 2010, the study said.

Commercial construction in the region will grow along with increased business activity and population growth at a rate of about 2.2 per cent over the medium term and 2.8 per cent over the long term.

Institutional and government building construction will grow an average of 2.2 per cent over the next eight years as new buildings are erected to meet health, education and other infrastructure needs.

Despite growth in demand, employment should remain at healthy levels, said Ron McGillis, past chairman of the Ontario Construction Users Council. McGillis, who is also manager of safety compliance and contractor quality of Ontario Power Generation, also spoke at the news conference.

In Ontario, overall construction investment is expected to increase by about two per cent per year over the next eight years, with growth speeding up over the course of the forecast period as the economy improves, McGillis said.

Residential construction should start to grow again this year, he said.

"Residential construction is driven by strong growth in renovation spending, averaging 2.5 per cent per year over the forecast period while new housing investment remains relatively constant," he said.

Construction employment has grown by more than 20 per cent since 2001, compared to only 11 per cent in all other industries, he said.

The number of construction workers grew from 230,000 in 2001 to 283,000 in 2007, an increase of 53,000 new jobs.

"But momentum has diminished and labour markets have entered a relatively stable period," he said. "Over the near term, all the trades and occupations are expected to remain at current levels of employment or see small declines."

Nonetheless, there are still risks of skills shortages and recruiting challenges, especially when it comes to major infrastructure, industrial and engineering projects, which often require large teams of specialized needs, he said.

Smaller communities may have the most trouble.

"Key trades required for these projects are in strong demand and will have attracted opportunities in many other markets," McGillis said.

Patrick Dillon, business manager for the Provincial Building and Construction Trades Council of Ontario, said industry must work to enhance trades training and promote construction careers to the province's young people.
IN POLITICS, THERE IS MUCH TO BE said for moderation and balance.

Here in Kingston, I believe our local council has provided good government, and I look forward now to seeing our focus shift to more traditional infrastructure projects and to stabilizing tax increases.

Although our governments at the federal, provincial and municipal levels are far from perfect, I believe they have all generally exercised good judgment, and a recent publication concludes this is true.

The Canada's Birthday edition of Maclean's magazine (July) compares Canada to its neighbours south of the border on every facet of our lives. Maclean's scoured census reports, polls, surveys, scientific studies, policy papers and consumer databases and concluded Canada is "wealthier and healthier, we work less and live longer, spend more time with friends, travel more and enjoy more sex than our American neighbours."7

It wasn't always like this. Back in the 1980s and early '90s, Americans were wealthier and more productive. Canada's media was awash with stories about dismal economic growth and low Canadian incomes, and our brightest were fleeing the country in what was called Canada's "brain drain."

Now, Maclean's reports all this has changed, and it credits, in part, the rising loonie, the boom in commodities and better public policy. Over the past decade, U. S. productivity growth has slowed, while we've been reducing our debt and lowering taxes. "In short, as a nation, we've been doing everything right, while the U. S. has been doing everything wrong."

As a nation, we have not done everything right, though. For example, the Harper government could have sent a government representative to the World Wind Energy Conference held in Kingston last month, given that climate change and the energy crisis are two very significant issues facing our world. And instead of being up on each other, it would be far more productive if our federal and provincial governments worked more closely together to address the serious economic situation we Ontarians find ourselves in - particularly in the manufacturing sector.

But, by any measure, Canada, Ontario and Kingston have done all right. There are few countries or places many of us would rather live in. It's true that here in Kingston we should have started earlier to make this city a more attractive community in which to live, study, work, invest and raise a family, and to temper our reliance on public-sector jobs as drivers of our local economy. And Ontario made some serious financial miscalculations when it swapped services with the municipalities in the late 1990s. But, overall, Canadian governments have performed well and their taxpayers are enjoying the dividends.

What's the secret? I believe it's all about practising moderation in all things (to quote an early Roman). It's about avoiding extremes, staying balanced, open-minded, fair and responsible, and listening to our neighbours - all deeply held Canadian traits, for the most part. They are traits not exhibited to a large degree by many American governments in the past decade or so.

From the municipalities' perspective, this approach means balanced policy at the local level. For example, environmental restrictions are important, but so, too, are economic considerations. In other words, it is not an either/or decision. Policy-makers must find ways to accommodate both concerns.

As a municipality, we need to look after our hard infrastructure - roads and bridges, for example - but it is also important that we look after the softer municipal infrastructure that supports our citizens' health and creativity, such as recreational and cultural buildings and green space.

We need to be concerned about our environmental footprint, but we also have to support initiatives that will keep our economy strong and help it grow in a healthy way for the sake of our children and future generations. Urban growth is food for our municipality if done in a planned and sustainable way.

Balance is what makes our idling and pesticide bylaws, our LEED buildings, the Ravineview water treatment plant upgrade, the Centennial Drive bridge and road expansion, the K&P Trail, the Grand Theatre renovations, the Invista Centre, the Springer Market Square project, the K-Rock Centre and the new Calvin Park library all excellent municipal policy initiatives.

Sometimes the balance shifts, leaning a little bit more one way than the other. Recent initiatives have leaned toward some of the softer infrastructure, strongly positioning our community as a desirable place to move to and to live, work and invest in. These initiatives have positioned us very well to attract new jobs, new citizens and new businesses while providing a high quality of life for today's Kingstonians and future generations. There are many indications already that Kingston is beginning to reap some of those benefits.
I strongly believe it's now time to shift the balance to more of the traditional hard infrastructure initiatives. It's time to strive for more and greater service efficiencies, and it's time to strongly focus on stabilizing tax increases to the three-to-four-per-cent range.

It's true I am a sort of middle-of-the-road, balanced kind of guy. Frankly, extremes make me nervous, and I think they make for bad public policy.

*Ed Smith is the city councillor for Williamsville district.

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The Kingston Whig-Standard

Council to make a wish list of city projects; Priority-setting session tonight at City Hall;

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WHAT DO YOU WANT?
There is always something going on in the city, as construction on Clergy Street shows. The newly completed multiplex centre (top right) is now open. A third crossing of the Cataraqui River is being considered at the end of Elliott Avenue, and the Memorial Centre is being considered for revitalization.

Mark Bergin/The Whig-Standard
Clergy Street was under construction between Johnson and Brock yesterday afternoon.

WHERE DO YOU SEE KINGSTON IN 2010? That was the question voters asked themselves when they went to the polls two years ago.

Tonight, the people they elected will begin to answer that question.

"People are asking, 'What has this council done?' and that drives me crazy," said Councillor Lisa Osanic.

She said she doesn't want to see this council leave office in 2010 with residents wondering what was actually accomplished in four years.

"That's not good," Osanic said. "We have to keep moving forward. "We have to do something."

Tonight, council will sit down for a scheduled three-hour priority-setting session. The 13 elected officials, including the mayor, will decide what tax increases for 2009 and 2010 they feel comfortable with, what projects they want to get done and which ones they want to put off.

It won't be easy and likely will require more than just one night.

"It's only a one-night meeting, so we're not going to solve all the problems," said Councillor Steve Garrison.

Last year, councillors had a series of meetings over several months that were called priority-setting sessions, but in the end, all that was produced was a list of criteria by which they would evaluate projects. Councillors didn't identify any specific projects they wanted to see undertaken.

That was a change from the previous council, which produced the so-called Group of Seven projects: The K-Rock Centre, Invista Centre, the Grand Theatre renovation, Market Square, construction of the K&P Trail and the expansion of the Ravensview water treatment plant.

In all, the previous council committed almost $220 million in spending on those items.

This council wasn't ready to do the same early in its term.

"We were still probably a little nervous about setting more large projects in motion without knowing the impacts of the projects that were coming to a close," said Councillor Dorothy Hector.

Garrison said that last year this council, which has eight first-time councillors, was still trying to get a hold of the general issues before delving into any projects. Now they will go decide what to build, and what to put on hold.

Top on the list of projects to evaluate is an aquatic centre with a 50-metre pool.

Or is that roads? Or parks?

Or sidewalks? Or infrastructure?

That's where tonight's meeting becomes interesting.

"It's time for us as a council to set our agenda for what we want to accomplish during our time ... in office," Hector said.

"The way to do that is to agree on one or two items of criticality for the community that have to be addressed."

The city's finance department told councillors in June that it was unlikely the city could handle every capital project that had been broached in the next decade. Those projects included improving roads, renovating the J. K. Tett Centre and Wally Elmer Arena, building a downtown transit terminal, a new bridge over the Cataraqui River, widening John Counter Boulevard and the pool.

The report found that the city was not spending nearly enough on roads, short by about $17 million this year. The city, the report said, should be spending $30 million annually just to maintain the roads it has, but won't reach that level until 2017.

In all, the cost of the major capital projects predicted
for the next 10 years is more than $406.2 million. Ratepayers, the report noted, would have to pay for $128 million of that through tax increases. To put that into perspective, raising $128 million from taxes would require an 85 per cent tax increase, which, using the average 2008 tax bill, would require each tax payer to cough up an additional $2,211 annually.

The remaining $248 million would be dealt with by issuing long-term debt.

The problem, the finance department says, is that all those costs push the city's debt level to the "cautionary range" of between $350-$425 million. That's the point when the finance department would wave the proverbial yellow flag in the hopes that council would put a hold on any new major projects.

Many of those new projects as well would bring with them additional operating costs, which would also have a direct impact on tax rates.

"It's going to effect the operational budget, but we don't have enough information to know how," said city treasurer Desiree Kennedy.

So it comes down to deciding how to spend money and what to spend it on.

"We can't have too much burden on the taxpayers," Osanic said.

"I'm hoping we can shuffle some [projects] and maybe that will free up money for the pool or other things."

Osanic said the one problem with having some projects put off until a later date is that a future council could kill the project. "It might be the risk we take," she said.

Councillor Bill Glover said the almighty dollar will guides his decision- making tonight: the amount of money the city has, how much new work will impact taxes, and what impact rising costs, such as fuel, will have on the city's "wiggle room."

Councillor Rob Matheson said one of his priorities tonight will be getting consensus on a new aquatic facility and "try to hold the line as much as possible on tax increases."

"What will guide my decision-making?" he said. "What's good for the community."

The 50-metre pool and aquatic facility brings with it an estimated price tag of more than $30 million.

Mayor Harvey Rosen said he didn't know if the pool could qualify for any funding from upper levels of government. The best thing to do, he said, may be to build a 25-metre recreational pool in a building that can be expanded to handle a 50-metre pool addition in the future.

Build the 50 metre pool, he said, "when the time is right ... but not now, I don't think."

"It's really a question of which projects lend themselves to more creative financing, or financing that's not rate related," Rosen said, citing a possible expansion of the airport -something that's not on the list of projects being considered -as one that could receive funding from senior levels of government.

One of the themes that came out of the 2006 municipal election -and one that has been repeated by some councillors during the pool debate -is that it was time to slow down and focus on what the city has before embarking on new projects.

"People are still saying ... we bit off way more than we can chew prior to 2006 and people want the dust to settle before we go on to new things," Garrison said.

"I would like to see us refocus our efforts on the basics ... and then looking at, if there's enough money leftover, adding new projects."

Garrison said he wants to ensure that older projects, such as the revitalization of the Memorial Centre, don't get lost in the priority shuffle.

"We need to remember the projects we've already committed to. To me, the most important one is the Memorial Centre," Garrison said.

"I'm very concerned about letting new projects usurp projects that have been waiting in the queue."

Councillor Vicki Schmolka said the challenge is that there is always something new for councillors to deal with.

"There's going to be challenges to sort through and that's why I don't think it's going to get done [tonight]," she said. "There's going to be a lot to talk about."

Hector said the hesitation that councillors felt last year about prioritizing projects hasn't entirely dissipated. Much of that has to do with a financial future that brings with it, among other things, uncertainty about fuel costs, she said.

"We should be very careful in our commitments so we have room to make adjustments for the unknown that may come our way," Hector said.

Fuel costs have already added to next year's budget and estimated tax increase. The city's finance department originally predicted a tax increase of three per cent, but revised the estimate in June to be more than six per cent. That would equate to an increase of $170 for the average taxpayer.

Budget templates went out to department heads last week and a final draft of the 2009 budget will be before council by October.

The mayor said taxes will be a priority for him tonight.

"My focus will be to keep a control on tax
"I'd be very comfortable with [a] three per cent [increase], but it's not likely going to happen," he said later. "Four per cent would be a reasonable increase.

"I had hoped at one time to see a zero per cent tax increase."

That can't happen, he said, because there hasn't been enough growth in the community. "Hopefully," he said, "it's going to happen."

The politicians must also consider the issue of what recently completed projects will do to the city's operational budget. For instance the Invista Centre, with its four ice rinks, will have maintenance, staffing and energy costs that are ongoing.

Tonight's meeting starts at 7 p.m. in the conference room on the lower level of the Rideaucrest Home for the Aged on Rideau Street.

"Anytime the council takes a good hard look at our financial resources and takes another look at what our priority projects might be, it will be an interesting time," Rosen said.

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Wish list

A list of major projects being considered by the city to begin in the next 10 years:

Upgrading what we have (spending considered to be infrastructure reinvestment)

* Memorial Centre revitalization, parks: $5.3 million
* JK Tett Centre: $13 million
* Public Works maintenance facility: $30 million
* Affordable housing (city's share): $5 million
* City administration building: $15 million
* Repurposing Wally Elmer Arena: $1.15 million
* Cook Bros. Youth Centre renovations: $2 million
* Artillery Park complex upgrades: $6.5 million
* Museum upgrades: $2 million
* North Block: $1.25 million Sub-total: $81.25 million

Projects city must go alone

* Renovations to the social services building at 362 Montreal St.: $2 million
* Downtown parking facility: $10 million
* Energy retrofit program: $8 million

* Servicing at the Cataraqui Business Park: $20 million
* Revitalization of the old industrial park: $1 million
Sub-total: $41 million

Projects eligible for grants

* Widening John Counter Boulevard: $54 million
* Wellington Street extension: $15.82 million
* New bridge across Cataraqui River: $85.57 million
Sub-total: $155,570,000

Nice to have

* Aquatic Centre: $30 million
* Memorial Centre revitalization project, buildings: $30 million
* Cataraqui Woods West community centre: $16.8 million
* Implementation of fire master plan: $11.4 million
* Lake Ontario Park upgrades: $8.5 million
* Deep sea dock: $7 million
* Waterfront land acquisition and trail development: $3 million
* Parks and open space land acquisition: Undetermined amount

* Track and field facility: $1 million
* Downtown transit terminal: $4.7 million, not including cost to acquire land * West end transit terminal: $500,000
* Repairs to former Imperial Oil building at 9 North St.: $1.5 million
* Expansion of city facility on John Counter Boulevard: $5 million
* Accessibility upgrades: $9 million Sub-total: $128.4 million

Grand total: $406.22 million

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An environmental watchdog lists Kingston as one of the cities across Ontario that could use more green infrastructure to reduce the billions of litres of raw sewage municipalities dump into the Great Lakes every year.

Ecojustice, formerly Sierra Legal Defence Fund, released a report this week that revealed at least 89 Ontario municipalities operate with outdated sewer infrastructure that regularly discharges untreated sewage into waterways during wet weather.

Combined sewers that carry both raw sewage and runoff from roads in the same pipe during heavy rain are to blame, said Liat Podolsky, Ecojustice researcher and co-author of the Green Cities, Great Lakes: The Green Infrastructure Report.

"The problem ... is huge and needs to be addressed," she said in an interview.

The report looks at cities such as Toronto, Windsor, London, Hamilton and Kingston that have already established green infrastructure projects, including municipal programs and funding, to reduce sewage overflows.

Toronto is leading the pack, with more green infrastructure projects in place than any other municipality in Ontario.

Canada's largest city has promoted green roofs, engineered and natural wetlands and forests, rain gardens, downspout disconnections that aim the water onto lawns and gardens, rain barrels and permeable pavement as relatively inexpensive ways to reduce the amount of water going into its sanitary sewer system. The idea is that these green infrastructure projects manage stormwater at the source by capturing runoff and retaining it before it goes into the sewer system.

Podolsky said municipalities, including Kingston, could implement more of those initiatives to improve the health of the Great Lakes.

Beaches that are closed to swimming, fish that are unsafe to eat, excessive algae and weed growth and decreased biodiversity are among the effects of combined sewer overflows, she said.

The problem is that much of the sewer infrastructure in Ontario cities, including Kingston, was built about a century ago and is unable to meet the demands of today.

"It is estimated that these overflows from cities around the Great Lakes amount to hundreds of billions of litres of a foul cocktail of raw sewage and stormwater each year - more than 90 billion litres from 20 cities alone," states the Ecojustice report.

To reduce Kingston's share of that pollution, the municipality promotes the use of rain barrels through a municipal program that sells them to the public at a subsidized rate each spring. Roughly 2,000 Kingston households have taken advantage of that program, which sells out every year.

Kingston also has programs that provide financial incentives to homeowners for disconnecting their roof leaders or downspouts (up to a $100 rebate) and sump pumps (up to a $500 rebate) so that the water doesn't flow into the sanitary sewer system. The city also provides free camera inspection of the lateral sewer pipe that runs directly to residents' homes and up to a $1,000 subsidy for repairs to cracked and broken laterals.

Jim Keech, the city bureaucrat who oversees Kingston's sewer system, said the city started upgrading its sewer infrastructure a decade ago and has spent tens of millions of dollars to reduce the amount of untreated wastewater it sends into area waterways.

A sewer overflow tank near the King Street Water Facility was completed and a new Harbourfront Trunk Sewer was built. There were upgrades at the River Street Pumping Station and the installation of a $20-million sewer pipe across the Cataraqui River. The $115-million retrofit of the Ravensview Treatment Plant is expected to be completed by 2009. The modernization of this facility will treat the waste that does get to the plant more thoroughly before it's redirected into the St. Lawrence River.

In January 2006, the city finished a $7.9-million cement holding tank for raw sewage. Its installation underneath Emma Martin Park at the foot of Cataraqui Street significantly decreased the number of sewage overflows from the neighbouring River Street pumping station.

Keech acknowledges that the city still has a lot of work to do to reduce the amount of untreated waste it continues to direct into area waterways during heavy rain. He said the Ecojustice report contains interesting ideas that Kingston may look at implementing in the future.

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Milliken withstands sharp criticism; Incumbent MP refuses to engage in heated debate with his opposition; ELECTION 2008;

Kingston and The Islands MP Peter Milliken played it cool again last night during the last of four local debates leading up to Tuesday's federal election.

The Liberal incumbent and 20-year veteran of the House of Commons has refused to engage in heated debate with any of his fellow candidates, sidestepping most of the usual campaign banter between political contenders.

Last night was no exception. Though yesterday's live televised debate on Cogeco Cable had perhaps more of an edge than the previous three, Milliken didn't veer from his laid-back, nonpartisan style.

He withstood sharp criticism about his record as Kingston's MP from Conservative candidate Brian Abrams, Green candidate Eric Walton and New Democrat Rick Downes, who has pressed Milliken at two previous all-candidates debates.

At the start of the debate, Abrams wasted no time to take the first jab at the Liberal MP.

Abrams said voters are tired of watching other ridings across Canada receive federal money for infrastructure projects while Kingston has been left out in the cold.

"You haven't delivered and that's why people want a change," he said.

Milliken countered by saying that Kingston has benefited from his leadership, despite the comments made by Abrams. He pointed out the growth at Queen's University and Canadian Forces Base Kingston during his tenure.

Milliken also highlighted the federal government's support to the tune of $25 million for the Ravensview Sewage Treatment Centre, as well as roughly $25 million in retrofits for Fort Henry.

As in previous encounters, the veteran Liberal MP spent much of last night's debate as the focal point of much criticism, particularly from Downes and Abrams.

Sponsored by the Chamber of Commerce, last night's 90-minute debate was moderated by its president, Janet Ashford. The event covered a handful of local and national topics, including the federal halfway house on Portsmouth Avenue, Kingston's economy, Canada's looming recession, employment, the family doctor shortage, poverty and affordable housing.

All candidates agreed that the relocation of the halfway house is a top priority.

On the employment issue, all of the candidates - except for Abrams, who focused on a need to boost Kingston's existing large employers - focused on "green-collar" jobs in the emerging renewable energy sector.

On the question of what the candidates, if elected, would do to stave off a recession and strengthen the economy, both Downes and Milliken focused on the need to boost the manufacturing industry.

"In Ontario and Quebec, we've got some serious needs in our manufacturing industries ... what we need is a strategy that targets the manufacturing industry and a tax system that's fair," Downes said.

Milliken also said strengthening the manufacturing sector is key to creating more jobs. He also pointed to the importance of providing funding for more infrastructure projects in municipalities, which will, in turn, boost employment.

Abrams said the key is to balance budgets.

"Balancing budgets ... it's maintaining the [Conservative] plan that's been in place for the last two and a half years," he said.

Walton said the answer to warding off a recession is to provide start-up help for new businesses.

"We need to provide the risk capital to entrepreneurs who are in Kingston and are waiting for it," he said.

On the last question of the night, the candidates all agreed there is a need for a national housing strategy.

"Absolutely, yes," was Downes's immediate response.

"It's very clear we have a housing problem in Canada ... government should regulate housing because there are people who are homeless.

Milliken pointed to the Liberal party's plan to invest in 30,000 new low-income housing units and to renovate an additional 30,000 homes that already exist.
"We believe that will help them," he said.

Walton said Canada's poor need more help.

"We need 300,000 homes and we need them built over 10 years," he said.

Abrams said Canada spends too much money housing people in temporary shelters and indicated that the Conservative party is willing to match the Liberal's low-income housing plan.

"It would be great if we could afford to build 300,000 houses," he said of the Green party's proposal.

Milliken had the final say at last night's debate.

He spoke of some of the restrictions associated with being the Speaker of the House of Commons, specifically in terms of partisan debate.

"Notice I haven't attacked the other [candidates]... I've stayed quiet on what may be deficiencies in their platforms," Milliken said.

Instead, he said, he has focused on the policies of the Liberal party.

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ABRAMS: An interesting new Tory

Conservative candidate Brian Abrams has had an albatross hanging around his neck throughout this campaign. The albatross has a soft wool vest in place of feathers, but voters aren't fooled, especially those hankering for change in Kingston and the Islands.

It's the Conservative Party's good fortune that someone of Abrams' skill, education and experience agreed to challenge a 20-year veteran MP and Liberal incumbent. But it's been Abrams' misfortune - and a dilemma for his admirers - that his energetic, well-organized campaign has been carried out in the shadow of a party leader who is deeply disliked by many voters.

Stephen Harper has been far more of an albatross to Abrams than the riding's long-standing Liberal incumbent, Peter Milliken, whose campaign lacks the energy, freshness and focus of the Conservative camp.

A sixth-generation Kingstonian making his first run for elected office, Abrams has tried to distance himself from Harper by stressing his social conscience, Kingston roots and support from Senator Hugh Segal, another self-described "Red Tory." In fact, Abrams is at odds with the albatross on a number of issues. He disagrees with incarcerating 14-year-olds for life, noting that his years in the RCMP showed that excessive punishment turns troubled youths into hardened criminals.

Two decades of policing in remote First Nations communities give Abrams a unique perspective on Canada and what it means to be Canadian. He left a promising career as a professional hockey goalie to join the RCMP and then left the RCMP to become a successful trial lawyer and business owner.

It comes as no surprise that Abrams, whose sons John and James make up two-thirds of the Abrams Brothers bluegrass group, strongly supports arts and culture, a position seemingly at odds with his leader. As MP, Abrams promises to strengthen Kingston's industrial base and build an arts centre in the north end, where he grew up. He also participated in a picket with Corrections Canada staff outside the controversial new $58-million wing at Collins Bay Institution.

Abrams speaks extremely well and does his homework. Although politically inexperienced, he sees himself as a cabinet minister, and it's not such a stretch, given his background in law and policing.

At 46, Abrams is ready to throw his talent and energy into something new. He's not a natural political animal - the party came to him, not the other way around - but his intensity and newness are refreshing.

So is his candour. When people say they'd like to vote for him but can't support Stephen Harper, Abrams quotes a phrase from the late Tip O'Neill: "All politics are local."

If voters can separate Abrams from the albatross, then this interesting new Tory may have a chance at representing Kingston and the Islands in Ottawa.

DOWNES: He knows what we need

We're heading for an economic recession. Possibly a long and deep one. In uncertain times, Canadians need to know that their federal government will make policy decisions that are compassionate. With the U. S. market meltdown overflowing into Canada, Kingston and the Islands NDP candidate Rick Downes says voting for his party is more important than ever.

At the top of their priority list, Downes and the NDP are promising to create a national child-care program, improve medicare and start us down the road to building a "new energy economy" - issues important here in Kingston and across the country.

Child care and medicare, in particular, have gotten too little attention in this election.

Currently, families get $100 a month to pay for child-care services. Downes said he knows people right here in Kingston paying $700 a month. To help bridge that gap, the NDP will provide a non-taxable child-care benefit of $400 a month.

On the health-care front, the NDP is proposing a national prescription drug program and reforming drug patent laws to make medication more affordable to Canadians. Layton is right when he compares his party's drug proposal to Tommy Douglas's push to create Canada's medicare system. Drug therapy is becoming increasingly important in patient care. The transfer to the provinces and territories would amount to $1 billion in the first year and increase gradually after that. We can't afford not to do this.

One way to help pull us out of a recession is to back a party that is committed to the concept of a green
economy - a new industrial standard that funds the research and development of renewable energy sources such as wind, solar and geothermal - and weans us from our dependence on oil.

Downes stresses that these new technologies also need the trained people to install them and keep them going. "Who's going to build the windmills? Who's going to repair the windmills? We have to address the issue of skilled labour. We need to have a strategy to build the new economy," he told the Whig-Standard's editorial board this week. The NDP has pledged $3 billion over four years to make the shift to green.

It will also implement a cap-and-trade system, capping the top 700 polluters across the country (including public utilities) and selling them credits they can trade with other companies.

"I think there's a willingness in the New Democratic Party to actually address the issue of greenhouse gas emissions," said Downes. "It comes back to the issue of political will."

Downes has a solid political track record in Kingston as a former school board trustee and city councillor. He knows what Kingston needs.

MILLIKEN: Experience and dedication

In his campaign literature, Peter Milliken writes of his experience and dedication. After 20 years as Kingston's member of Parliament, not even his fiercest critics can reasonably dispute either of those elements. Ask Milliken about the third part of his manifesto - results - and he talks about money he helped to secure for renovations to Fort Henry and money the federal government put into the upgrade of the Ravensview sewage treatment plant.

Milliken takes pride in this record and it's a good thing, because he gives us precious little else by which to judge him. He's spent much of his career as Speaker of the House of Commons, and while he talks of being a Liberal and will proudly explain his party's policies, he won't get drawn into partisan talks of being a Liberal and will proudly explain his party's policies, he won't get drawn into partisan debate, lest it tarnish his reputation as the impartial arbiter of the House.

How, then, is a voter to decide? Milliken gives us a clue. At a session with the Whig-Standard's editorial board, he said it's much easier to advocate for one's riding as Speaker than as a partisan MP. Opposition members, he says, don't want to be seen hanging around government MPs. Fraternization makes for bad optics. Ministers, he said, tend not to have much time for back-bench government members, either.

When the Speaker comes calling, ministers are "very attentive and usually quite reasonable," he says. If they want a motion or maybe a little extra time, "they've got to deal with me. "Even if he's no longer Speaker after this election, Milliken claims it's much easier for a senior member "to be collegial" with the brokers of power than for a junior member, and in the entire House there's only one member more senior than Milliken.

In what may be the most uninteresting election since Sir John A. Macdonald was a teetotaler, and in quite likely the most vanilla riding in the land, we're left with quite a simple question: Why not send Peter Milliken back to Ottawa?

It has been a very polite campaign, and shouldn't that tell us something? If, after 20 years in office, Milliken has done nothing to inspire an opponent to get on a stump and proclaim he is a dirty, no-good scoundrel, maybe he isn't. Critics have suggested Kingston needs "a full-time MP," suggesting that being Speaker detracts from caring for one's riding, but in 20 years, nobody has provided enough of an example of that to prevent Milliken's plurality from growing with each passing election. (And don't mention the lack of federal funding for the K-Rock Centre; that long ago was shown to be the city's own fault.)

Money for an old fort and sewage treatment are not the kind of achievement for which anybody is going to erect a statue. Nuts-and-bolts projects, though, are somehow symbolic of a man who seems just as happy to referee the game as play it, just as pleased to expedite a passport application as he is make a headline.

Is that a bad way for a politician to be?

WALTON:

A fresh Green face

Eric Walton is all business. And for the first time, the Kingston and the Islands Green party candidate is running a fully funded campaign.

In a recent visit to the Whig-Standard's editorial board, Walton talked about the economy, foreign policy, business development, health care and how many of these issues are linked to the environment.

The Green party is working hard to be heard. Walton, the architect of the party's Green venture capital investment policy, is pushing a variety of issues to shake the criticism the Greens are a single-issue party.

In this election, the party's presence on the ballot was further legitimized by the nationally televised leaders' debates, where Green leader Elizabeth May went punch for punch with the other opposition leaders, battering Prime Minister Stephen Harper. May was considered by many to be the winner of the English-language debate, a coup for a party that has yet to elect a member.

May's performance was critical for her party's candidates. During the local campaign, Walton said that much of the political banter at local doors centred on May's participation in the leaders' debate.

But Walton, a Queen's University political studies grad and co-founder and financial manager at a multi-doctor family medicine clinic in Kingston, has performed well on his own, too. He is quick to
defend the Green party climate plan as the first in Canada to tax carbon dioxide as an incentive to reduce emissions. The carbon tax system will tax emissions at $50 per tonne, and shift the savings to reduce income and business taxes. It is a plan that shifts Canadians to a more fuel-efficient economy, and away from fossil fuels.

A government directive is the only way to force change, he said. Don't expect market forces to dictate the change.

Money generated through a carbon tax would boost the development of social housing projects, addressing poverty and homelessness, he argues.

On the economy, Walton pitched a new green venture capital investment program aimed at creating small business startups in smaller cities, such as Kingston. The plan would have the feds and local government provide matching funding for small business startups. As an experienced entrepreneur, Walton understands that securing funds for a small business startup is a challenge because of the risk. With jobs in jeopardy, government investment in startups is a risk worth taking, he said.

In a riding with a strong incumbent, Walton said he is running to win. But more realistically he is running to achieve a first for the Green party in this riding - 10% of the vote, a threshold required for a party to be refunded the majority its campaign expenses.

In an election of firsts for the Green party, Walton will be the first Green candidate to cross the 10% vote threshold in riding history.

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The bucket of a Kingston Fire and Rescue aerial ladder is manoeuvred toward a roof at the Ravensview sewage treatment plant to rescue a worker injured in a fall from a higher part of the building yesterday morning.

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Worker hurt after fall at Ravensview

A construction worker suffered minor injuries after a fall at Ravensview, the city's sewage treatment plant on Highway 2 in the east end yesterday morning, police say.

Emergency crews were called to the plant at about 9:30 a.m. after a report that a man had fallen from one rooftop to another and was unconscious.

Kingston firefighters used a truck-mounted ladder to reach the man.

Const. Mike Menor of Kingston Police said the man suffered a shoulder injury and was taken to hospital but he was not believed to be seriously injured. It's believed he fell two or three metres.

"It was a subcontractor working on the job," said Nancy Taylor of Utilities Kingston.

Ravensview, Kingston's primary sewage treatment plant, is in the midst of a $115-million retrofit that is scheduled to be complete next year.

Taylor said she did not have any other information about the accident. She could not say if the Ministry of Labour was called to investigate.

Rescuers called in to help boaters

A Harrowsmith man was wet but unhurt after he fell off a boat near Garden Island, a small island just off the north shore of Wolfe Island, near Marysville.

Rescuers, including two aircraft from Trenton, the Coast Guard and the fire department, scrambled after a 911 call of a man overboard at 6:30 p.m. Thursday.

Capt. Wade Buell of the Coast Guard rescue station in Kingston said the man was one of two sailors aboard an 18-foot long catamaran that had sailed out of Navy Bay.

The man who fell into the water was wearing a wetsuit and a life-jacket, but there was still a problem.

"Unfortunately, he was the person who knew how to operate the cat," Buell said.

The other man, from Sydenham, wasn't able to bring the catamaran around to rescue his dunked companion, so he sailed straight back to Royal Military College, where he sought help from another boater. In the meantime, the 911 call also was made.

The man who had fallen overboard swam to the north shore of Garden Island, where he was picked up later by a Coast Guard Zodiac.

Buell said both men are in their 20s.

Police seek help in search for man

Provincial police are asking for the public's help in finding a 44-year-old Marmora man who is believed to be heading to the Kingston area.

Central Hastings OPP say Patrick Kelly left his home Thursday afternoon. He is five-foot-11 and 170 pounds, with a shaved head and grey mustache. He was wearing a gold jacket.

Police did not say why they are anxious to find Kelly.

Smuggling concerns lock down Collins Bay

Concern that contraband has been smuggled into Collins Bay Institution prompted a lockdown Thursday.

Prisoners at the medium-security prison in Kingston were confined to their cells and the normal routine disrupted after Corrections Canada received intelligence about smuggling. The prison service did not say what kind of contraband it fears may have been brought into the facility.

Members of the public who play to visit the prison are asked to call ahead first.

Two-car collision reroutes traffic

Kingston Police were called to a serious two-car collision at Johnson and Frontenac streets just after 2 p.m. yesterday. The intersection was closed and traffic rerouted for a time because of the crash. No other details were available.

Police don't suspect foul play in death

Police say foul play is not suspected after a man was found dead inside a van parked at the No Frills grocery store lot in Napanee. Officers checked the vehicle Wednesday at 2:15 p.m. A computer search showed it was registered to a 54-year-old Cornwall man who had been reported as missing.

Gananoque chamber to hold meeting

Gananoque Chamber of Commerce will hold its annual general meeting Thursday at the Arthur Child Heritage Museum on Water Street. On the agenda are a review of the fiscal year, a bylaw review and election of directors. Anyone interested in serving on
the board of directors is invited to attend. The meeting will commence at 5 p.m.

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Voters in Kingston and the islands did what was expected and returned incumbent Liberal MP Peter Milliken to Ottawa for the seventh straight election.

Canadian voters don't elect members; they throw bad ones out. Milliken proved good enough to keep.

But voters sent a message nonetheless: Milliken must do better for his constituents.

Milliken won by a slim margin over Conservative candidate Brian Abrams. It was the closest election race in the Kingston and the Islands riding since Milliken upset Flora MacDonald in 1988.

Milliken, who has served the riding for 20 years, earned less than 40% of the vote, a loss of about 7% compared to the 2006 election.

The issue that hurt Milliken is the one he maintained helps him: being Speaker of the House. Early in the campaign, Milliken made a comment that he would have to decide on his future in government based on what position he might fill.

Later in the campaign, he said confusion over this statement (he then said he would serve out his term) would hurt his chances. And it did. His comments made him look like a politician who thought he, and not the electorate, would decide his future.

Milliken's position as Speaker of the House became a topic often discussed at local candidates' debates. Milliken's view was that as Speaker he must abstain from taking a position on issues. During debates, he failed to state his position on such subjects as the proposed uranium mine near Sharbot Lake.

Milliken has argued that holding the Speaker post affords him the opportunity to speak with cabinet ministers and the prime minister, which is a challenge for ordinary opposition MPs. People, though, want a voice.

Two of the top five employers in Kingston are linked to the federal government. Canadian Forces Base Kingston and Corrections Canada collectively employ more than 10,000 people from the region. Both need a stronger federal voice.

Immediately after the election, Milliken must broker a deal between Corrections Canada management and the union on the open concept living range at Collins Bay Institution. Critics of the $58-million project say the opening should be delayed because of safety concerns.

Milliken's successes as a member of Parliament include lobbying hard to keep CFB Kingston and the Royal Military College in Kingston. The college was threatened with closure in the earlier 1990s, and Milliken lobbied to keep it open. Canadian Forces Base Kingston also had an uncertain future in the 1990s. Federal budget cuts were expected, and Kingston's base was a possible victim. Milliken did his part to shore up support for keeping the base open.

Today, the base and RMC are growth sites in Kingston and continue to inject millions of dollars into the local economy through jobs, construction projects and spinoff jobs in the private sector.

Milliken also worked to gain $25-million in government funding for the Ravensview sewage treatment plant project and millions more for rebuilding Fort Henry.

But the electorate is clearly saying, what have you done for me lately?

Kingston and the Islands voters are not prepared to warm up the car for a Milliken retirement tour. As the sitting member, he must give the riding a voice and work harder for local results.

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For two years, economists and governments watched and waited for the looming effects of the sub-prime lending spree to wash over the U. S. economy. Few could have predicted how that profligate lending and spending would swamp the entire world economy the way it has in recent weeks.

Finance Minister Dwight Duncan acknowledged Ontario's share of the fiscal pain on Wednesday, when he announced there would be a $500-million deficit for the fiscal year ending next March 31. The province will collect $880 million less than projected in corporate taxes due to the economic downturn, $180 million less in land transfer taxes because of faltering real estate sales, and $65 million less in gas taxes because people are driving, well, less.

Government deficits could become the norm over the next few years. In fact, bank economists such as BMO Financial's deputy chief economist, Douglas Porter, who spoke in Kingston this week, are recommending that governments suck up some debt in order to weather the storm. Porter said it would be "not wise" for the federal government to raise taxes and cut program spending.

Yet on the same day Duncan was following this very prescription in Ontario, B. C. Premier Gordon Campbell said his government would roll out $144 million in personal income tax reductions.

The debate smacks of Ontario in 1992, when then-premier Bob Rae tried to impose spending discipline through what became known as "Rae days" - unpaid time off for government workers.

Duncan was strategic and cautious this week. Along with the deficit news he announced some timid economic measures of his own. The province will delay the planned hiring of 9,000 nurses. It will hold off on the implementation of 50 health teams. And it will defer a number of scheduled repairs to schools.

One has to wonder how staggering nursing hires and school repairs will save the economy. The savings are so petty. Is this just a warning shot across the bows of nurses' and teachers' unions? Chances are good that there will be more cuts next spring to the health and education sectors.

Critics say the Liberals could have avoided a deficit. They point to the 24% increase in spending from 2004 to the present, much of it in health care, education and infrastructure renewal. And Ontario's manufacturing and forestry sectors were already in serious decline before the banking crisis hit.

But spending on these underfunded areas were exactly the tonic needed following the years of Conservative governments in which public services and infrastructure were ignored. Could anyone reasonably argue, for instance, that the provincial contribution to Kingston's Ravensview sewage treatment facility was money poorly spent?

The Liberals even managed to balance the books and pay down the debt.

The province's real Achilles heel is its manufacturing decline, particularly the automotive sector. The province needs to retool its economy. It must lead the way with vestment in education and research. But it mustn't forsake the slight gains made in health care and education. Letters? Send them to whiged@thewhig.com

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The waterfront is Kingston's premier recreational resource. It offers opportunity to get outdoors, to be active, to celebrate nature and to enjoy our natural advantage.

But Kingston needs a waterfront that is accessible to everyone, not just a few people, from Collins Bay to Ravensview. Accessible means that people can get to the shore via public walkways. They can ride bicycles on the pathway. Persons with disabilities can manoeuvre their wheelchairs easily, and people can actually use the shoreline and water. There is no shortage of ideas; just ask your family members and neighbours how they imagine the waterfront.

Kingston's waterfront pathway should be widened to offer separate cycling and walking lanes. The gaps in the trail need to be eliminated. The trail should have consistent pavement, signage and other markings along its entire length from west to east. The waterfront needs picnic tables, little fireboxes to cook hot dogs, bathrooms and emergency communication in case assistance is needed.

Citizens and tourists should be able to visit marinas, walk on the docks and view the harbour from a boardwalk constructed on the breakwater at Flora MacDonald Basin. Private developers must no longer be able to build on the precious little bit of land left beside the water that has not been developed.

Make swimming in Lake Ontario and the western end of the St. Lawrence River a priority. Easy access beaches, ladders at docks and life-saving gear would encourage use. Put a couple of rafts out at Richardson Beach, restore the bathhouse, open a canteen and look for the swimmers. Open-water swimming is a natural for this area, so Kingston should have lots of athletes trying to qualify for the long-distance 10-kilometre events at the London 2012 Olympic Games.

Hang-gliding and sailboarding are naturals for Kingston's waterfront. Provide suitable facilities at the PUC docks, where hang-gliding now takes place. There has been rowing in the Kingston area for almost 170 years. The Cataraqui river is perfect for rowing and canoeing (especially the competitive kind). A long competition course and new, attractive easy-to-access facilities, launching ramps and parking would draw more people to that part of the waterfront, and offer more "on water" activities. This part of the waterfront is ideal for rowing and Olympic-style canoeing.

Recreational canoeing and kayaking are quite inexpensive activities, but there's no place to launch easily. Launch sites at West Street and at the rowing club are slippery and not planned for getting underway in one's canoe or kayak. As well, those sites aren't designed for trailering a small boat with an outboard motor or a Laser with a mast and gear. Besides, where do you park your trailer while you're out on the water?

The waterfront trail needs to be opened up from Collins Bay to the Woolen Mill, and along the shore to Ravensview. Post historical information all along the trail, as well as information about flora and fauna. There are many varieties of flowers, weeds and trees to see; wildlife is common. Walking tours with this sort of information available in windproof and waterproof boxes could be provided, and would be very popular.

Kingston's waterfront needs a champion. It needs someone or some group willing and able to go to bat for the waterfront, remove obstacles that are in the way and keep a citizen-focused vision in front of everyone. The waterfront champion needs to engage the municipality, province, federal government and citizens. Everyone in Kingston has opinions about the waterfront, and most of us yearn for the day when we can boast about our greatest treasure.

Our waterfront champion will empower us to take pride in what has been referred to as "the crown jewel of Kingston," will advocate for the waterfront and will enable us to find the means to do what Kingstonians wish for. Together we must do everything we can to develop this opportunity. It's long overdue.

* Diana Davis Duerkop is a former vice-president of the Canadian Olympic Committee and former president of Synchro Canada. She oversaw development of the rowing/canoeing course and river-edge boathouse for the 1989 Jeux Canada Games in Saskatoon. She has an extensive involvement in recreation, particularly swimming and boating, and is a waterfront enthusiast.

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Peter Milliken celebrated a personal and political milestone last night.

At an invitation-only dinner, the Kingston and the Islands MP and Speaker of the House of Commons was feted for his 20 years in Parliament. It was on Nov. 21, 1988, that Milliken was first elected as an MP, launching what would become an impressive political career.

Why impressive? First of all, the seven election victories speak for themselves. Milliken's Liberal party has experienced many ups and downs over those 20 years. He's been witness to a dizzying array of victories, defeats, leadership changes, scandals and accomplishments. Yet in all that time, through all those experiences, Kingstonians' trust in Milliken has barely wavered.

Similarly, he has earned the trust and admiration of his fellow parliamentarians. To win his fourth term as Speaker this week, Milliken had to overcome six challengers. His was seen as a steady, experienced hand on the Commons tiller to steer another minority government through turbulent economic times.

However, both re-elections, in Kingston and in the Commons, were marked this time with some hesitancy.

Prior to the dissolution of the last Parliament, Milliken had come under heavy criticism for his meek handling of disruptive MPs.

The House of Commons had become a rancorous place. In calling the election, Prime Minister Stephen Harper referred to it as "dysfunctional." Where general civility was concerned, that was certainly the case.

Yet Milliken did not deserve to take all the heat. While he could have asserted his authority more forcefully and more often, the MPs themselves have to assume the largest part of the blame. They are, after all, adults. They are supposed to represent Canadian society at large. As role models and diplomats, they are the ones who failed.

Similarly, here in Kingston, as the general election neared its end, Milliken admitted in aWhig-Standard editorial board session that he and his workers were detecting a different reception on the doorsteps than they had in previous campaigns. Many Kingstonians felt that his Speaker's duties were preventing him from being an effective MP.

In that same editorial board meeting, Milliken had to go back nearly a decade to recall his last major accomplishment for the riding - securing federal funds for the Ravensview sewage plant upgrade.

The election results were telling. Milliken's share of the popular vote dropped by 7% from the 2006 election.

Though his party was returned to Parliament as the official opposition (and had its ranks substantially diminished in the process), Kingstonians expected Milliken to do better when it came to securing funds for federal projects. With this in mind, he must now exert his influence in the corridors of power to get Kingston's deep-water dock project moving.

The hope of the tenacious staff and volunteers of the Marine Museum of the Great Lakes is that Ottawa will fund repair work on the historic drydock and build a pier with the capacity to accept the cruise ships that travel Lake Ontario waters.

Milliken asserted during the election campaign that as Speaker he has influence with cabinet ministers. Securing a new deep-water dock would be a great development for Kingston and testimony to Milliken's parliamentary achievements on behalf of his constituents. It's one thing to celebrate milestones, but more important to deliver on the goods.
The Kingston Whig-Standard

Residents savour the smell of success; City's $116M retrofit of sewage treatment plant nears completion;

Saturday, December 13, 2008
Page: 1
Section: News
Byline: BY JENNIFER PRITCHETT, WHIG-STANDARD STAFF WRITER;
Illustrations: 1. Michael Lea/The Whig-Standard
2. Mark Bergin/The Whig-Standard

Jim Keech (left) and work planner Jeff Froats walk through the biological aerated filter facility at the Ravensivew plant.

Jeff Froats, Utilities Kingston work planner of the Ravensview Upgrade Project, holds before, left, and after containers of water from Ravensview.

Once a source of odours so bad that neighbouring residents had to keep their windows closed year-round, Ravensview sewage treatment plant was an aging facility that barely passed Ontario's environmental standards.

That's all expected to change now that its $116-million retrofit - the largest construction project in Kingston history - is nearing completion six months ahead of schedule.

"We're actually anticipating to have substantial completion by the end of March and to be completely done by May or June," said Jim Keech, president and CEO of Utilities Kingston.

The state-of-the-art facility wasn't supposed to be done until January of 2010.

In fact, the plant, located out Highway 2 east along Lake Ontario at the headwaters of the St. Lawrence River, switched from basic primary sewage treatment to the more environmentally friendly secondary treatment process this fall.

The facility -built based on projected growth for Kingston in the next 25 years - is touted as the largest sewage plant of its kind in Canada and among the most modern in the world.

The proof of that is in the quality of the treated wastewater that's directed into the lake.

Brown and murky after going through the old process, the roughly 60 million litres of wastewater the facility flows into Lake Ontario each day is now clear.

The city's wastewater is the cleanest it has been since the first toilets were installed in Kingston in the late 1800s.

During a recent tour of the shiny, new plant, Utilities Kingston work planner Jeff Froats proudly showed off the clarity of the wastewater in a glass after it went through the new treatment process.

"Now it looks like a glass of water - sparkling clean," he said.

Froats said the new system at Ravensview has brought about a vast improvement in the quality of water the plant discharges. While the old plant was meeting Ontario's environmental standards, it wouldn't have meet those requirements because the province is in the process of making its rules more stringent, Froats said.

The retrofitted plant processes between 50 million and 75 million litres of wastewater a day, generated by 70,000 residents.

It has a processing capacity of 195 million litres of waste per day.

Every time a toilet is flushed or a sink of dirty water is sent down the drain in the old City of Kingston, the waste ends up at Ravensview for treatment. The entire process takes about two days to make its way from local homes, through municipal sewage pipes to Ravensview and through the secondary treatment process at the plant.

The new process has been slowly phased in over the past year.

The retrofit project has taken roughly two years. At the construction peak, as many as 175 workers were on site.

The project required 25,000 cubic metres of concrete to be poured for several new buildings that together make up 10,000 square feet to house the new equipment.

Each of those buildings is interconnected with a series of tunnels that carry electrical and pipe work, as well as act as a passageway through the guts of the plant.

One of those new structures, the biosolids building, will replace an asphalt pad that was used to store the solid waste before the upgrades.

"With the prevailing winds here, our neighbours had to keep their windows closed all year round," Froats said.

The biosolids building, complete with an air treatment system, stores the solid waste known as cake. After it's separated from the liquid waste, the
manure-like sludge is housed in three massive cement bunkers.

The cake is stored until spring, when it is trucked away to be spread as a fertilizer on farm fields around the Kingston region.

"Cake is basically sludge that's been spun through a centrifuge so the liquid is spun out of it," Froats said.

"Cake is what's leftover and it's pumped over from our de-watering building into the [biosolids building]. It looks like cow manure, really."

The new system, which removes more water from sewage than the old system, produces 11,700 cubic metres of cake per year.

Once the raw sewage comes into the plant, it first goes through a de-grit process and then goes through the primary clarifiers, which basically separate the solids from the liquid.

The sludge-like waste, which contains the solid matter, is stored in the primary digesters and then moved to the secondary digesters, where the waste is held for 28 days. Inside the digesters, the waste is heated to 35 degrees and millions of bacteria bugs eat away at the sludge to break it down.

"That's where the methane gas is created," Froats said.

After four weeks in the digesters, the sludge is moved to the de-watering building where it's dried to become cake. After that, the cake is stored in the biosolids building until springtime.

The liquid waste, immediately after it's separated from the solids in the clarifiers, is moved by gravity through pipes that go underground into the bottom of the biological aerated filter facility.

Kingston has the largest such facility in Canada. "We have the newest one - there is a similar process as this being used in Syracuse, N. Y.,” Froats said.

It is inside this facility that the secondary treatment occurs.

Once inside the bowels of the biological aerated filter facility, four 200- horsepower pumps force the effluent water upward into a channel that flows the waste into 11 treatment cells, which are full of tiny styrofoam-like balls.

These tiny white biostyrene balls act as a bio-filter for the sewage. Attached to the biostyr are tiny bugs that eat away at the bacteria in the waste.

"That's what helps to filter the water," Froats said.

"When the effluent comes up through these cells, we add air to it and then the bugs start to clean the effluent - it's just a filter system."

The bugs also remove the ammonia found in the waste.

"In the old system, we didn't remove the ammonia," Froats said. "It went directly into the lake."

Inside the cells, water is flushed through 77,000 nozzles in the cement floor. For the final stage of treatment before the wastewater goes out into the lake, chlorine is added to the waste to kill any remaining bacteria.

After the chlorine is added, the waste goes through a pipe that directs the effluent into two chambers, where sodium chloride is added to neutralize the chlorine before the water goes out to the lake.

In about two weeks, a new co-generation plant at Ravensview will start using the methane that comes from the sewage to help power the equipment. Methane is created from the breakdown of organic matter in the sewage.

The co-generation system will use the majority of the methane gas that's created and then blend it with natural gas to use it as fuel for other operations at the plant, such as generating electricity to heat the treatment plant and to heat the hot water used to break down the sewage.

A newly installed flare stack will burn off any excess methane.

The facility is about 90% complete and with most of the construction done at Ravensview, workers are now completing the administration building that houses one of the plant's control rooms. The other two are located in the de-watering building and one in the biological aerated filter facility.

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The Kingston Whig-Standard

Out with the old in '08;

When I started working at The Whig-Standard back in April 1983, I remarked to friends and family that I went from photographing the Montreal Canadiens to photographing the Kingston Canadians; from setting up my camera to take pictures at the Montreal Forum to snapping photos at the Kingston Memorial Centre.

While the Memorial Centre wasn't the Montreal Forum by any means, I got used to the old place. I enjoyed photographing the Canadians, Raiders and Frontenacs over the years there as well as figure skating, minor hockey, trade shows and the occasional concert.

This year marks my 25th anniversary of working at the Whig. During my time in Kingston, there were many moves by various councils to some day replace the Memorial Centre. It was a great place for its time, but had certainly outlived its usefulness. The city and its residents finally got a new place to watch hockey, concerts and other events when the K-Rock Centre opened its doors on Feb. 22 with a Frontenacs hockey game against the Belleville Bulls. The next night was a concert featuring hometown favourites The Tragically Hip.

The K-Rock Centre was one of many significant public facilities that opened in Kingston in 2008.

Prior the K-Rock Centre was completed, the new Kingston Police headquarters at 705 Division St. was unveiled. It was finished in the fall of 2007 but the official opening took place in late January.

Early May saw the much anticipated reopening of the Grand Theatre after major renovations that took more than two years to complete. In late May, the Invista Community Centre, with four ice pads, opened for business.

Renovations were finally completed on Springer Market Square and ceremonies were held on a very hot Sunday afternoon in June to mark that occasion. The open space of the square is an area of many uses, year-round, from the farmers' market to public skating in the winter, FebFest, concerts, buskers and movies in the summer. It's a real people place.

One project that is not quite as exciting, but is no less important as the other facilities, is the Ravensview sewage treatment plant on the east side of the city. While the expansion is not quite complete, the new facility will be in full operation in early 2009 and at about $116 million, it will cost more than all the other facilities mentioned above combined.

On this page are just a few of my photographs showing the changes in Kingston landscape in 2008, one of the biggest years for municipal projects in Kingston's history.

While the Kingston Frontenacs are still not the Montreal Canadians, the K-Rock Centre compares well to the Bell Centre in Montreal, smaller but a modern facility that will serve its citizens well for many years to come. imacalpine@thewhig.com

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The Kingston Whig-Standard

News Briefs;

Wednesday, January 14, 2009
Page: 3
Section: News
Byline: ;

Power cut to homes and Ravensview

More than 4,000 Hydro One customers in Kingston lost their power yesterday just before 3 p.m.

The bulk of the affected customers were east of the Cataraqui River, including CFB Kingston.

Rural customers had power restored at 8 p.m., and power for other customers was restored by 9 p.m. The Hydro One website listed other power outages around Kingston and Wolfe Island that were to come to an end by midnight.

The outage also left the Ravensview water treatment plant in the dark last night. Hydro One said it didn't know when power would be restored to the sewage plant.

The cause of the outage was unknown at press time last night, but crews were manually checking each part of the power system to find the source of the problem.

Fire in home causes $3,000 in damages

Damage is estimated at $3,000 after a small fire at a home on Liddell Crescent in Polson Park yesterday morning. The fire was in the rear door frame of the single family home and was quickly put out by firefighters. The cause is under investigation, but it is not considered suspicious. The fire happened at 8 a.m.

Groups to host silent vigil tonight

Two local groups will host a silent vigil for Gaza tonight at 5 p.m. in front of City Hall. Solidarity for Palestinian Human Rights and the Kingston Coalition for Gaza are holding the event to commemorate the "continuing struggles of Palestinians living under Israeli occupation."

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The Kingston Whig-Standard

The state of the city, 2009;

Wednesday, January 14, 2009
Page: 5
Section: Editorial/Opinion
Byline: ;
Illustrations: 1. Ian MacAlpine/The Whig-Standard

Mayor Harvey Rosen says that while Kingston will not be untouched by the economic turmoil sweeping North America, "we will not be hit as hard as many other communities."

My annual "state of the city" address is a mixed message in tone, but Kingston is a very optimistic, innovative and forward-thinking community, one that can meet even the most arduous of challenges.

Kingston city council has set an overarching goal to become the most sustainable city in the country, and to that end our ongoing efforts through our community strategic plan will guide us to this realization.

A sustainable community can be achieved through four pillars: economic, culture, social and environmental sustainability.

Kingston is positioned, through the FOCUS Kingston group, to complete this plan in 2009, which will provide the blueprint for our city's long-term sustainable future, one that hopefully other communities will want to emulate.

Fiscally, the City of Kingston is in very good shape. We have maintained our A-plus bond rating with Standard and Poors, and we are well below our maximum debt capacity according to the Ministry of Municipal Affairs guidelines. Both of these points are crucial for a municipality to run its operations while planning for future infrastructure development opportunities.

And of important to note to the average household, Kingston's property taxes are not rising as much as those of many other jurisdictions. Some municipalities in Ontario are experiencing the prospect of double-digit tax increases for this year, along with some very sullen local economic prospects. I take no pride in the burdens of our neighbouring cities. However, I am happy to say that City of Kingston staff, at council's direction, have done a very good job of limiting a tax increase to a reasonable level.

Even with the current state of the global economy and the numerous economic challenges with which we are faced now - and with which we will be faced in the future - we should be able to moderate taxes even more.

Kingston's strength during tough economic times is our inventory of stable, public-sector employment. We do have a significant advantage over other eastern Ontario communities, apart from Ottawa. Our major employers - the City of Kingston, CFB Kingston, our hospitals, our three post-secondary institutions and other schools, and provincial and federal government offices and institutions, to name a few - are able to sustain a substantial core of employment through good times and bad. The services these groups provide remain constant and we rely on them, day to day, no matter the challenges we face economically.

We will not be hit as hard as many other communities, which should allow us to, in this time, position ourselves to an increasingly favourable position when the markets turn. Kingston will be able to hit the ground running, whereas other communities will be making adjustments.

We should be able to take advantage of our favourable position; to gain jobs in areas that, though effected by the economy - the "boom and bust" cycle - will place Kingston on the map as a key community in which to invest. We need more of those jobs to benefit as much as we can from the "boom" cycle while still benefitting during economic downturns from our stable public-service sector.

A little bit of less good news is the prospect that council's newly espoused projects will require further debt financing by the city, and that may take us closer to a limit established by the ministry. There is a zone beyond which we don't want to go - we cannot go over the limit the province prescribes - but we don't want to get so close that it becomes uncomfortable for the city. That may be a place we would end up if some of the projects that council wishes to pursue are launched.

For instance, a 50-metre pool - which is not a project I support - would be subject to further debt financing by the city, but unlike the K-Rock Centre, whose financing is paid for by user rates and ticket sales, this project will require property rate support both for operations and to meet its financing obligations.

The K-Rock Centre has, in year one, not yet achieved its business plan objectives. However, I am confident it will ultimately do much better than it is required to do to service the debt over the long term. The city will draw from its capital reserve to bridge this gap. As it is, it costs us nothing to operate the centre.

A 50-metre pool is recognized, even by its proponents, as a project that would need to be serviced primarily from municipal tax rates, because user rates would come nowhere near the level required to pay for its operation, let alone paying off the capital debt on the facility.

This is not to say that Kingston doesn't need a new aquatic facility and this is not a statement against our
citizens and visitors participating in expanded aquatic sports activities. What I am saying is, we need to look at the larger picture and decide what we are able to create relative to our needs and what is our affordable project.

Another project that has been touted as one of importance to council is a garage facility for the public works department. The question is not whether we need a garage facility, because there is no doubt the existing one is in very bad shape, but how extensive and how elaborate a garage we need.

Some have estimated that a new facility would cost $30 million, which strikes me as rather rich and assumes something substantially more than a building that simply houses vehicles. I believe we will have to take a hard look at this project and provide the department with an appropriate facility that will answer their needs without overextending ourselves financially.

There are projects that are on the horizon that will receive senior government support. The J. K. Tett Centre is one that I would anticipate would be in line for such consideration. The city is working in partnership with Queen's to create a campus concept on the Tett Centre property that will benefit the university as well as the community user groups. Queen's has significant funds in place specifically slotted for use on this project, and the senior government funding requirements would be the final piece of this exciting new piece to Kingston's cultural infrastructure.

However, if we don't receive senior government funding, any additional monies required to build the facility will, again, be debt-financed and will, again, go towards bringing the city closer to its debt limit should the project proceed on its own.

Another project that we are hopeful to receive senior government support to create is the final priority of the previous city council term. The expansion and widening of John Counter Boulevard remains a challenging fit for a funding program under the current guidelines. Many infrastructure programs encourage projects with respect to waste water treatment and other environmental initiatives and less so for bridges and roads. This is a challenge we must overcome and I will continue to work with Mr. Gerretsen and Mr. Milliken to achieve this important funding for Kingston's busy east-west artery.

The eventual extension of John Counter Boulevard continues to the third crossing of the Catarqua River, which is something which remains significantly distant, probably not arriving before 2015 or beyond. This project cannot happen without senior government support. Two-thirds of that project will require senior government support and it will have to be the subject of a Building Canada Fund grant by the provincial and federal government, or whatever program of that nature takes its place in those years.

One project I am confident will receive senior government support is the Kingston west water treatment plant expansion. The city has recently acquired land from Invista to allow for such development, and history tells us that our senior governments support projects such as this. I see no reason why Kingston wouldn't be suitably positioned to receive financial assistance for this valuable municipal service.

From a social services perspective, the city has a very healthy balance in its Social Services Stabilization Fund, which is in place to answer an expected rise in the demand for social service payments that the city will be responsible for because of the economic downturn. This is what we are anticipating during the next 12 to 18 months.

The city is responsible for 20% of the cost of Ontario Works payments, although the province has uploaded the Ontario disabilities payments and payment with respect to prescriptions for disability payment recipients. The fund hopefully will be sufficient to answer any significant increase in the demand for these services.

I am also pleased to report that Kingston has made some significant progress in our attempts to recruit more family physicians to our city. Thanks in large part to the family physician recruitment campaign directed by KEDCO, Kingston exceeded its 2008 target of 10 new doctor recruits, as we successfully signed 12.

Last month, the day-long doctor recruitment event held at the K-Rock Centre registered 2,000 citizens with a much-needed family doctor, and for the first time in a number of years Kingston actually has family physicians with available patient space on their rosters. For those still without a family doctor, I have been informed that the Kingston Family Health Team at 797 Princess St., Suite 206, is still accepting new patients, as well as a number of the clinics that fall under the Maple Family Health Team. Bring your health card to any of these locations and they'll sign you up and take care of a crucial need that all of us must have in place for the health care of our families over the long term.

I am very proud that Kingston is making such great progress on this matter, and we will continue to recruit in the coming years, as the need for new doctors will grow.

More good news for 2009: Relatively speaking, the city has a great deal of money from the provincial and federal governments for infrastructure maintenance and refurbishment. The real challenge for the city will be to do as much work as our capacity will allow us to do without creating such a demand for contractor services that it drives up the cost of construction beyond what is reasonable in terms of inflationary increases. We want to be able to get as much work done for the money we have as we possibly can, and if the cost of the work unreasonably increases because of the demand for contractor services, that will limit the amount of work we can achieve.

Thanks to effective lobbying by our MPP, John
Gerretsens, the City of Kingston has been included in the provincial Eastern Ontario Development Fund, of which some of our local businesses are taking advantage, expanding their workforce and improving technology and innovation in the local workplace.

Given the economic downturn, Kingston, like countless other communities, will not see substantial increases in new industrial investments coming to town. There are some prospects that KEDCO is monitoring and we are hopeful that they will bear fruit this year.

KEDCO also tells us that tourism numbers were down somewhat in 2008. However, Kingston's largest tourism attraction, Fort Henry, experienced an increase in visits in 2008. It is probable that such an increase was, in large measure, due to the world heritage designation the Rideau Canal, the fort and the Kingston fortifications collectively received.

The strength of the Canadian dollar relative to the American dollar that was realized through much of last summer may have contributed to the mild tourism decline. However, with the Canadian dollar losing some ground in recent months, we are hopeful that this trend will improve in this new year.

Kingston is also expected to host visits from touring cruise ships this year, an endeavour that will increase tourism revenues and continue to drive our need to improve our local harbours and marina docking areas in future years. With Kingston recognized as the fresh water sailing capital of the world, it is only natural that we continue to look for effective future investment in our waterfront and an efficient way to receive travellers by ship.

Kingston proudly unveiled some significant new or refurbished facilities in 2008: the K-Rock Centre in February, the Grand Theatre and the Invista Centre in May, and the completion of the final phase of the Springer Market Square revitalization in June. I strongly believe that all of these amenities will have a lasting positive impact on the image of our city and will contribute to what has been referred to as an essential feature of a community's attraction index: "quality of place."

With these venues completed and operating for one complete year through 2009, coupled with effective tourism marketing campaigns and hesiveness with the Kingston Accommodation Partners and the Downtown Business Improvement Area board of management, Kingston is well-positioned to hold our own and hopefully improve our tourism figures in 2009. I am proud to observe that Kingston has truly become a year-round destination for tourism, and as word continues to circulate throughout the region, I am confident that our tourism figures will grow.

Kingston is geographically situated centrally among Toronto, Ottawa, Montreal and upper New York state. During difficult economic times, people tend to be a little more conservative with their travel dollars, which may mean that people living in these larger regions may make Kingston a favoured destination in their future plans. Our city provides an interesting and exciting location, on a comparatively reasonable budget, within a very reasonable travel time.

Recently, the Conference Board of Canada provided presentation comments about tourism in Kingston and commended our efforts in making this community an interesting and innovative tourism destination. Much more can be done to nurture our assets in this regard. However, I am encouraged that we are on the right path. Kingston would certainly welcome new visitors who are looking to explore our sites and attractions for the first time, as well as those who already consider us a favourite.

There are some local ongoing construction projects that continue to make steady progress; the Ravensview water pollution control plant, the expansions of KGH and Hotel Dieu hospitals, some much-needed affordable housing units, as well as ongoing new housing starts and some exciting retail developments that will generate increased retail traffic and new jobs in our north end off Division Street.

Queen's University continues to undertake its ambitious campus facelift, Corrections Canada will be phasing out the use of the infamous halfway house on Portsmouth Avenue to a more appropriate new location on the Collins Bay Penitentiary grounds early this year, and I would expect that St. Mary's of the Lake, Providence Care, will be starting construction on the old psychiatric hospital land in the very near future.

As you can see, a bit of a mixed bag awaits us in 2009. However, Kingston has much to be excited about and much to look forward to with optimism.

I am not so naive as to think that this economic downturn will not negatively affect Kingston. There will be job losses or layoffs in some sectors of our industrial and other private sectors - I am aware of some that occurred late last year that no doubt brought a very sobering start to a normally jubilant holiday season for some families. Overall, I am confident that Kingston is well-positioned to stem the tide and emerge as a continuously strong and vibrant community.

In terms of personal goals, I challenge each of our citizens to extend themselves beyond the role we currently serve, to better impact the people of this community and our environment. A small gesture can make a world of difference to someone in need. Shovel the driveway or walkway of a senior citizen or the physically challenged, pick up garbage and recycling items in your neighbourhood, start a neighbourhood cleanup initiative to combat graffiti, contribute extra groceries to one of the many important food banks that serve the less fortunate in our community, contribute to a favourite charitable event or volunteer your services through Volunteer and Information Kingston.

Kingston can build on our generous, caring reputation through the collective small efforts of many individuals. Never believe that your contribution is insignificant or inconsequential.
We have a hometown that is the envy of many in this province. Let’s continue to enhance the blessings that we enjoy as Kingstonians while acting in the spirit of Rotary’s motto: “service above self.”

Once again, thank you for inviting me to participate in this event as we start another new year. I wish each of you a productive, happy and healthy 2009.

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Outage causes sewage spill;

The Kingston Whig-Standard

The city of Kingston purged roughly 10 million litres of partially treated sewage into Lake Ontario on Tuesday night when a lengthy power outage caused equipment to stop working at the Ravensview sewage treatment plant.

Yesterday, Utilities Kingston president Jim Keech said the backup power system for the retrofitted plant wasn't up and running.

"The generators are there and we were hoping that they would have been able to operate [during Tuesday's power outage]," he said.

"Unfortunately, they didn't and we are actually working through that right now with a contractor and a consultant."

The facility's $116-million upgrade is expected to be completed by May or June.

The plant, located off Highway 2 along Lake Ontario, upgraded from basic sewage treatment to the more environmentally friendly secondary treatment process last fall.

It was that secondary process that failed during Tuesday's power outage.

Keech said he wasn't completely surprised the backup generators didn't kick in when the power went out because Utilities Kingston is still in the process of testing the new equipment.

"If this would have been six months from now as opposed to [Tuesday], there would have been practically no impacts on the process," he said.

The sewage bypass started at 3:15 p.m. on Tuesday and til 10:30 p.m.

Utilities Kingston also kept extra staff on duty overnight in case the power went out again.

"All of our water and sewer equipment in the east was affected," Keech said.

"We did what's called a secondary bypass so we still provided primary treatment, but the secondary treatment we just installed wasn't operating. We got the one level of treatment, but not the second."

Hydro One spokeswoman Daniele Gauvin said it was windy conditions that caused the power outage. It took crews a while to complete repairs because it was a fairly main line that was damaged, she said.

"You have to go through every section to identify the problem," she said.

While some customers had their power restored by 8:30 p.m., others were without electricity until 10:30 p.m.

Ravensview was without power until 10:30 p.m.

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JUST WHAT SHOULD THE CITY NAME the expanded Ravensview treatment plant? It certainly isn't an "environmental centre," according to a majority of councillors.

The debate over the name arose while councillors decided whether to adopt a naming policy for Utilities Kingston facilities.

What councillors decided to call that plant on the east side of the Cataraqui River was simply the Ravensview Sewage Treatment Plant, which didn't smell good to some council members.

"It does do a little bit more than just treat sewage," said Councillor Mark Gerretsen.

Councillor Leonore Foster wanted it called the "Ravensview Environmental Centre" after residents asked for the name change.

Councillor Bill Glover pooh-poohed the idea, saying the name change wasn't "plain speaking." An "environmental centre," he said, required some sort of education aspect - making it a place of learning. It is an aspect missing, he said, from Ravensview.

"I believe in plain-speaking. And no matter how you dress things up, there's still strong smells," Glover said.

Mayor Harvey Rosen jokingly suggested calling Ravensview the "outflow remediation plant."

Councillor Joyce MacLeod-Kane said she felt the plant would have to sell something for it to get the name "environmental centre."

"If there something sellable at this [plant]?” she asked. No, came the answer from staff.

Foster tried one more time to change her colleagues' minds, saying that visitors are coming from all over the world to see the new environmental features and modern treatment methods at the plant.

By an 8-5 vote, council voted against Foster's request.
The Kingston Whig-Standard

Council should cut the crap and rename sewage facility;

Wednesday, March 4, 2009
Page: 4
Section: Editorial/Opinion
Byline: ;
Column: Letters to the Editor

I read with disbelief that city council defeated a motion to rename the Ravensview sewage treatment plant the Ravensview Environmental Centre ("Council debates name of expanded Ravensview treatment plant," Feb. 21).

I find it hard to believe that this council is so fractured and divided that the "Gang of Eight" councillors who voted against this proposal by Councillor Leonore Foster would defeat such a simple motion. The name change would have satisfied a large number of Pittsburgh district residents who are concerned about their property values and have endured the construction noise, blasting and constant truck traffic that this massive $100- million project has generated over the last two years.

Although I haven't lived close to that area for six months, I lived within earshot of the plant for 20 years, enduring the noxious odours and such that escaped if the wind was coming from the wrong direction. We were told that this would all disappear when the new plant was opened, and, hopefully for the residents still living nearby, this will be true.

Councillor Bill Glover was quoted in another Kingston newspaper saying that you cannot sugar-coat the name of the facility. I submit that Glover and the rest of the "Gang of Eight" have been sugar-coating most things they support since they were elected to council.

Glover's flippant remark that there is no educational aspect to the plant is untrue. Every schoolchild of this educational district in Grade 5 and above should have a tour of this facility when it is finished to learn how sewage is treated and disposed of properly. This state-of-the-art facility, in fact, should be on the list of mandatory visits of any secondary and postsecondary student who is studying the environment and its related issues.

I urge Foster to not give up in this matter, and I would like council to revisit the issue and agree to change the facility's name to Ravensview Environmental Treatment Centre. And if such a motion is defeated again, I would urge the Pittsburgh Residents Association to commission a sign to be posted on the property that says: "Another example of Pittsburgh district cleaning up Kingston's crap."

Ted Burgess

Kingston

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I would like to begin by thanking Switch and the Community Go Green Fund for sponsoring this exciting series of workshops on renewable energy technology for homeowners. The support from the Kingston Economic Development Corporation (KEDCO), Utilities Kingston, St. Lawrence College, Queen’s, Kingston Technology Council, ELORIN and the many companies and organizations that have come together as a team to focus their knowledge and expertise to create this "HOW TO" series, is the beginning of a process of learning and understanding for those that can most benefit at the grassroots level - homeowners.

Regardless of everything we hear around us on the economic crisis, we in Kingston are in a unique situation and have the opportunity to realize the full benefits of renewable energy solutions. Kingston is a hot bed of knowledge and potential with its three major education institutions. St Lawrence College has made a major effort to lead the way forward by providing alternative energy technology courses and education in clean energy is inspiring. We need to take advantage of every chance we get to further the knowledge of every homeowner, builder, developer, policy maker and law maker in order to ensure a sustainable use of natural resources.

Some of the benefits are:

* Reduced greenhouse-gas emissions.
* Improved public health and quality of life.
* Production of energy locally and in remote locations.
* Increased fuel diversity.
* Reduced reliance on fossil fuels.
* Job creation and opportunities for businesses and farmers to supplement their incomes.

When the U.S. chose change, with President Barack Obama pushing for renewable energy as a first choice, we finally see our own Canadian government begin discussions regarding policies and strategies that may be able to put Canada back on the international map concerning the fight against climate change. Our Ontario government, with the Green Act, has also begun a process that can only provide a positive effect to support and accelerate action in the province towards renewable energy alternatives.

However, in my view, most of the key changes to moving senior government leadership to take the hard decisions stems from the innovative, creative and determined actions of municipal governments and people within the communities.

We have seen, in Kingston, policy created to ensure that all new municipal buildings are built to a LEED (Leadership in Energy and Environmental Design) standard. This is now evident in the K-Rock and Invista centres, Kingston Police headquarters and now the soon-to-open, state-of-the-art Ravensview Sewage Treatment Plant.

In adopting the vision that Kingston is Canada’s most sustainable city, Kingston city council, by focusing its strategies for legislation on renewable energy and quality-of-life issues, has furthered the fight against climate change at a grassroots level.

Not too long ago, the city enjoyed the ranking, by the Corporate Knights, as Canada’s third most sustainable city and by Money Sense Magazine as the fourth best place to live. There is definitely more to come.

The new draft Official Plan for the amalgamated city will, for the first time, address sustainability and the use of renewable energy technology by homeowners, builders and developers. This is a key policy document that outlines the plan for the development of the city over the next 20 years. It is a critical and bold step at the grassroots level of government to address the advances of technology, energy deregulation, and growing environmental concerns and awareness. We are certainly not the first to do this, yet it is a major shift from previous plans.

Though the focus is on the proper positioning of infrastructure, it begins the process of moving Kingston towards a goal to being self-sufficient in energy and a green energy producer for our neighbours. The goal is for a policy for individual homeowners and businesses that is not overly restrictive, yet ensures that the infrastructure is compatible with neighbouring land uses.

Many ask why are we not imposing rules for all new buildings in the city to be built to Energy Star, LEED or other higher energy standards? The answer is that a municipality is unable to impose building standards in excess of the building code legislated by the Ontario government.
It is up to individuals, builders and developers to make the choice to be more energy-efficient than the building code demands. This is not easy and that is why this series of workshops is such an important step.

It is my hope that the education and learning opportunity provided in this workshop series will empower all the participants, homeowners and builders alike so they can begin a process of demanding higher standards of energy efficiency in building design and construction. You will ask questions and challenge the status quo on what the options are to increase the usage of clean energy technology.

I cannot understate the importance for our future how the creation of a growing nucleus of people that are knowledgeable in renewable energy opportunities can and will turn into real and tangible assets for our community.

The knowledge gained in this workshop is a beginning. Learn what you can from each other, share that knowledge and go out there and apply it. We will soon see that effort put Kingston on the map as a centre of "green" energy leadership and usage.

We like to say that Kingston is the place where history and innovation thrives. Therefore, we should have pride in our accomplishments and know that we are striving towards being the most sustainable. We need to say to those around us, "Come see what we are doing." We need to be proactive to be early innovators in Ontario and Canada on renewable energy opportunities. We can do that by implementing what we can in our homes and work places, and in the process show the world that Kingston cares about its future children and grandchildren.

I believe that Kingston is one of the best cities in the world and that Kingston will be Canada's most sustainable city. My hope is that, by participating in this series of workshops on "HOW TO Technology on Renewable Energy for Homeowners," each of you will leave believing that you can play a part in making sustainability for Kingston a reality. And that you, too, will begin to believe what I do - that Kingston is one of the best places to live and will be Canada's most sustainable city.

- - -

On the Net

* www.switchkingston.ca.

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Ontario’s environmental watchdog will be in Kingston for the next couple of days to speak at Queen’s University and to tour the city’s upgraded sewage treatment plant.

Gord Miller, the province’s environmental commissioner, will speak at the Queen’s School of Policy Studies today about how to influence government policy. His talk will touch on recommendations the environmental commissioner has made in his past reports.

Miller’s job as environmental commissioner for Ontario is to monitor and report on the government’s compliance with the Environmental Bill of Rights to ensure that the province’s natural environment is protected and conserved for future generations.

Tomorrow, Miller will tour Ravensview sewage treatment plant, which has undergone a $116-million retrofit.

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Yes, let's call things what they really are;

Ted Burgess's letter "Council should cut the crap and rename sewage facility" (March 4) caught my attention. He's complaining that city council won't rename the Ravensview Sewage Treatment Centre the "Ravensview Environmental Centre." It seems a reasonable request, but council is against the idea. Councillor Bill Glover says you can't sugarcoat these things; they are what they are.

The councillor has a point. Things should more accurately reflect what they are, so, inspired by Glover, I suggest the following:

* Rename the K-Rock Centre "A Tax Increase Waiting To Happen"

* The McDonald-Cartier Freeway can be called "The Kingston Bypass."

* The St. Lawrence Seaway could be called "The Kingston Marine Bypass."

* Aberdeen Street could be named "The Queen's Annual Riot Zone."

* The Memorial Centre could be renamed "The No Longer Memorial Centre."

City Hall will always be City Hall, but perhaps the council chamber can be more accurately referred to as "The Place Good Ideas Go To Die."

Ray Bergstrom Kingston

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How the City chooses construction projects;

Construction projects are chosen after careful evaluation by City and Utilities Kingston engineers. "We want to maximize the effort and monies going to improve infrastructure. If we need to rebuild a road, it makes sense to see if the sewers underneath it also need work and to combine those efforts whenever possible," says Jim Keech, President and C. E. O. of Utilities Kingston and Commissioner of Public Works.

Right now, the City's out-dated sewer system remains a priority. The old combined sewer system (which carries both household waste-water and storm water) is being separated to further reduce sewer overflows and preserve Kingston waterways.

Sewer reconstruction projects are given a sewer condition classification rating, and combined sewers in drainage areas where there is good potential to quickly remove storm water from the sanitary system are given priority.

12 criteria for roads

Road improvement projects are evaluated using a roads condition survey, which is updated every three years. Pavement data is fed into a software program that evaluates road segments using 12 criteria (e.g. pot holes, rutting, and vehicle ride) producing an overall condition index score. This is reviewed along with the road's classification (i.e. volume of traffic, whether it is an arterial road, collector road etc.). The need to maintain a target split between roadway reconstruction and resurfacing is also considered, as laying asphalt resurfacing maximizes the service life of a road.

Watermain reconstruction projects are determined by the break history of a watermain, trends in requests for service, the age and size of the watermain, and whether other recent construction activity points to the need for increased water capacity.

Gas main reconstruction projects are determined by leak detection surveys, trends in requests for service, and the age and size of a gas main.

"Because Kingston is an historic city, we have a lot of infrastructure in need of attention," says Keech. "We also have to consider our financial and personnel resources. We want to do the absolute best that we can with what we have."

The Ravensview project will be completed six months ahead of schedule.

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The state-of-the-art Ravensview Sewage Treatment Plant will be complete this spring - months ahead of schedule. The east-end facility is already processing millions of litres of waste-water a day. The $116 million Ravensview plant allows for the secondary treatment of waste-water, improving the quality of the water that exits the facility.

To handle 95 million litres a day

"The water coming out of Ravensview is far cleaner now than it has ever been in the past," says Allen Lucas, Utilities Engineer, Technical Services with Utilities Kingston. "This facility will result in downstream improvements making Kingston a true leader in practical environmental protection."

Ravensview’s 95 million-litre per day waste-water processing capacity ensures sustainability and meets the needs of Kingston as it grows over the next 20 years.

Ravensview is the sixth of the Group of Seven projects to come to completion. The others are: the INVISTA Centre, the K-Rock Centre, the K&P Trail, the revitalization of Springer Market Square, and the renewal of the Grand Theatre.

The Ravensview upgrades will decrease odours, noise and energy consumption, and will increase capacity by one-third.

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Ahead of schedule and under budget:

Pomerleau’s project surpasses all expectations

MATTHEW DESROSIERS - The ODI Construction Report General Feature

To call the Ravensview Water Pollution Control Plant (WPCP) project in Kingston a staggering success is an understatement.

This project has exceeded expectations across the board, in no small part due to the efforts of Pomerleau, a general contracting and construction management company based in Quebec with offices in Ottawa (ON), Halifax (NS), Montreal (QC), Quebec (QC) and St-Georges (QC).

Allen Lucas, utilities engineer and project manager with Utilities Kingston, the project owner, said not only is the project significantly under the $116 million budget allocated by city council, but it’s also several months ahead of schedule.

Although the contract with Pomerleau states it must be completed by December 2009, estimates are that all work should be done by June. Even with the project under budget and ahead of schedule, Lucas said Pomerleau hasn’t cut any corners.

“The budget is one thing, but the quality of work that we’ve got out there is very high,” he said. “Pomerleau has really excelled, showing us that you can do a good job and you don’t have to be overpriced to do it.”

Pomerleau’s contract for the project was approximately $89 million. Additional project costs include engineering fees, equipment fees, etc.

“We are significantly below budget, ahead of the schedule, have very good quality work, and (have maintained) good relations,” said Normand Fortin, Pomerleau’s Ravensview project director. “That’s the word I have from the owner and a lot of the people around. Everybody is satisfied.”

Pomerleau bid the job in June 2006, was awarded the contract in July 2006, and was on site early August.

“It was a major upgrade of an existing sewage treatment plant,” said Fortin. “The project involved retrofits of all the existing processes and buildings, and the addition of a secondary treatment process.”

The contract called for Pomerleau to upgrade the existing processes through the modification and replacement of old equipment, and the construction of six new buildings. Included are, most notably, a new co-generation facility and a biological aerated filter facility (the new secondary treatment process).

The project also involved completely new site services such as a water main, storm, and sanitary facilities.

“It’s like they have a brand new facility.”

Despite the success of the project, it wasn’t easy. Pomerleau had to work hard to meet various challenges that arose during construction.

“One of the key challenges here was to perform all of this work while the existing plant was running,” said Fortin. “We had to maintain the treatment at all times.”

In order to maintain the primary treatment of water, Pomerleau had to schedule various small shutdowns and bypasses while they worked on different areas of the plant, whether they were doing modifications or adding something new. A lot
of planning was done at the design stage in order to achieve this objective.

"Mostly, it had a good schedule and sequence, and good procedure, we were able to do it," he said. "Also, one thing that really helped a lot was the fact that Utilities Kingston, in addition to all their operators on site normally, had assigned a person full-time with us to facilitate the coordination of the construction, start-up and commissioning activity with the operation of the plant."

Fortin said having that person work with them on a daily basis made things much easier for everybody.

"Communication between contractor and owner in this project was a real success and a good example," he said.

"That role was something unique for us," said Lucas. "It was a first for us, but it worked so well that we would do it again, and I would recommend doing it again."

"That coordination effort was the key to things going off smoothly as they have."

The new secondary treatment process is the plant's most unique feature. Although it's been in use in Europe for 10 to 15 years, the system is just now making its way to North America.

The biological treatment involved building 11 new cells at the plant. At the upper portion of each cell is a concrete floor filled with holes. Those holes are plugged with a series of nozzles, 77,000 of them, to be exact, which lead to 5.5-metre tanks below the deck.

The tanks are filled with what's called a fixed media, which are really just poly styrene balls. These balls are used to cultivate microorganisms, which, when the water is fed through the fixed media from the bottom of the tanks, eat and destroy harmful bacteria in the water.

The nozzles are installed to keep the fixed media, which are 2mm to 3mm in diameter, from rising up into the cells, while allowing the water to flow through normally. It took 60 truckloads to fill all 11 cells three metres deep with the poly styrene balls.

"In the secondary treatment process, you compress mother nature into a small footprint and you get a bunch of microorganisms that are going to draw from the waste water the dissolved carbon, dissolves fertilizer, ammonia and the phosphorous," Lucas explained. "These organisms live, grow and die. You harvest those and turn them into biowastes. In the process, while they're growing and living, they're cleaning the water for you."

Lucas said the process is the same as if you were to simply dump the waste water into the river. Eventually, all the waste will be destroyed by microorganisms in the river, however it will take much longer.

Although the plant is still not running to full peak capacity, Lucas said the results are beyond anyone's initial expectations.

The system was designed to put out half of the contaminants as the original. Government regulations state that the plant is only permitted to release up to 25mg/litre of suspended solids into the river. Originally, they were putting out 21 to 22mg/litre.

With the new system in place, Utilities Kingston was hoping to achieve 15mg/litre. However, the plant is currently only releasing 2 or 3mg/litre of suspended solids. When the plant reaches peak capacity, Lucas expects the number will rise only marginally, up to between 9 and 10mg/litre.

"We are extremely impressed with the technology," he said.

With the primary treatment plant, they were having trouble meeting the carbon regulations, which again were set at 25mg/litre. Once again, with the new process, Lucas expects somewhere between 9 and 10mg/litre once they reach capacity.

Lastly, Utilities Kingston will be required to start running a lethal toxicity test, which measures the amount of ammonia in the system. The new system was designed to reach 10mg/litre, however, they are currently experiencing less than 1mg/litre of ammonia.

'We're very pleased with that.'

Because of the technicality of the project, and the sheer volume of management that was required by Pomerleau to make progress while maintaining the primary treatment process, a lot of the credit for the success of the project has gone to Fortin and his team.

"Our responsibilities include the construction and the full commission of all the processes," said Fortin. "It means that we deliver to the owner not only the facilities, but a facility that is fully commissioned and operational."

Along with the construction crew, Fortin employed an assistant project manager, a site engineer, a planning engineer, a quality assurance coordinator, three mechanical and electrical coordinators, a health and safety officer, and many others.

"It's an impressive team," he said. "We are ahead of schedule, but it's not for nothing. We worked very hard."

Fortin said it was Pomerleau's professional approach to their work that made them the perfect choice for this project. They took the project on as a team, taking into consideration everyone's objectives, needs, and goals for success. When a problem came up, it was a team effort to find ways to overcome. A perfect example of this was the excellent communication between Pomerleau, J.L. Richards & Associates (the lead consultant) and Utilities Kingston, which essentially facilitated the project's implementation. What may have seemed like an overwhelming obstacle, installing the new system without interrupting the ongoing processes, was overcome by this team approach.

"One comment we hear often from clients is that they like working with Pomerleau," Fortin said. "We don't bring problems. We bring solutions."

Congratulations to Pomerleau.

We are proud to be part of this prestigious project.

MSE Contracting

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Upgrades to the Ravensview Water Pollution Control Plant represent the most costly municipally funded capital project in Kingston's history. The three-year, $115 million undertaking, slated for completion in 2009, incorporates one of North America's largest Biological A aerated Filter (BAF) installations. Benefits from the complete overhaul, which increases capacity by one-third, involve far more than sewage treatment infrastructure - they set a new standard in environmental stewardship, cost management practices, and community care.

From first screening to final treatment, the Ravensview expansion is designed to decrease odour, noise, air pollution, and energy consumption while treating 30 per cent more waste water, up to 95,000 cubic metres per day (cu. m/d).

City officials and construction partners wanted to do more than simply bring the 50 year old plant into the modern era and beyond. Despite a larger capacity, they demanded a decreased environmental impact, improved air and water quality, increased noise abatement, energy efficiency, and superior biosolids handling.

Continued on Page 3
Not yet content, senior management partners recognized there had to be a guaranteed legacy combined with an immediate impact on Kingston's citizenry, particularly those who were most in need.

Allen Lucas, P.Eng., project manager of the Ravenview expansion for Utilities Kingston, embarked on a partnered approach. He describes the team-building technique as "a non-binding commitment by all parties to work co-operatively as a team in a spirit of trust and respect to achieve common goals and objectives and to promote smooth information exchange and creative problem solving."

"Partnering focuses on the strengths of each participant to efficiently and safely achieve a quality end product, on time and within budget, without unresolved disputes."

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Ravensview served the city well, implementing new technologies over the years, first in the 1970s and again in 1994, when ferric chloride and aluminum sulphate processes were added to the treatment protocol. "It bought us some time," said Mr. Lucas. Ravensview currently has an average treatment capacity of 72,800 cu. m/d, but demands of this rapidly growing city are increasing, and the plant no longer meets the city's self-imposed stringent environmental standards. A dedicated effort began in 2000, identifying and addressing many issues, including the challenges posed by site topography, zoning requirements, existing woodlands and residential developments, and most importantly, the non-negotiable continuing operation of the existing plant.

Utilities Kingston doesn't simply want to meet existing standards and treatment capacity demands; it wants to greatly exceed them. This fourth overhaul of Ravensview is comprehensive and incorporates "an unusual number or environmentally advanced tools and systems." Officials predict Ravensview, once completed, will treat waste water with state-of-the-art equipment and best practices that serve as a model to other municipalities throughout North America. It will make the city an international leader in the sewage treatment field, and become an educational and training resource for the public and other operating authorities. Typically, sewage treatment follows a standard process. Sewage is conveyed to the plant, and screened to remove floats, which are usually non-organic in nature. The remainder then goes through another process to remove inorganic solids, primarily sand or gravel. The biosolids are then removed to a storage site awaiting distribution to contractors. The liquid goes through a series of settling tanks, which separate more of the solids from liquids. The solids are routed to the digesters where they are cooked to destroy pathogens. The liquid progresses until it meets or exceeds effluent standards and is then chemically treated with chlorine, and eventually repatriated with nature. "The general public has no idea what happens when they flush the handle," noted Mr. Lucas. "For the last 50 years, the only thing between their toilets and the St. Lawrence River were these settling tanks. At one time, no one gave a second thought to overflow running directly into the river but under no circumstances is that acceptable now. We have spent and are spending virtually millions to eliminate overflow. We have to guess the worst case scenario when designing volume into the system."

Utilities Kingston and J.L. Richards addressed much more than volume, although that was enough of a challenge. In addition to population-based demand and 100-year storm predictions (a meteorological prediction of an extreme hydrologic event with a recurrence interval of once in a century), the engineers inherited problems from the last century. "As soon as waste water enters the system, it flows into sanitary sewers, many of which are deteriorating," explained Mr. Lucas. "That produces a lot of grit, which makes its way with all the other materials to the treatment plant."

The current configuration of the Ravensview plant uses a clamshell to remove grit from the grit channels. The upgrades include an automated grit auger to remove grit and pump it into a settling tank. The liquid goes back into the treatment process, and the grit and gravel is washed and cleaned and transported to a landfill. A third screen with a finer mesh will be introduced to the system to remove more of the floats.

A new sludge dewatering facility with two large-capacity centrifuges will handle effluent faster and more efficiently, and from initial introduction to final removal from the site, the sludge centrifuging, digester gallery, and biosolids storage will be enclosed. Currently Ravensview has three digesters operating at 37°C and a fourth digester is under construction. The new anaerobic digester is equipped with thermophilic capacity (operating at 55°C instead of 37°C) and exceeds current biosolids management requirements. "It kills more of the harmful microorganisms and produces a virtually pathogen-free product," explained Mr. Lucas. "We're going above and beyond regulations. We're not required to take measures to this extent but we're very concerned with setting a positive example for environmental stewardship."

Once the centrifuge and digester process is completed, the dried sludge is conveyed underground to the new three-cell biosolids storage facility. It controls odour through negative pressure. Even the truck loading area is enclosed, protecting nearby residential areas. "We have always enjoyed a great relationship with our neighbours and they're very pleased with the pending upgrades and our new environmental initiatives," noted Mr. Lucas. "We also have a very conscientious biosolids contractor." Ravensview's designers wanted local satisfaction combined with a positive global impact, which the new digester helps achieve. A higher operating temperature increases biogas production which will feed the cogeneration facility. In its new incarnation, Ravensview will require approximately one megawatt (MW) for normal operations, requiring installation of a
new 44 kilovolt (kV) line to an electrical substation, and electrical upgrades throughout the site. The cogeneration building will house two 575 kW natural gas powered generators for backup in the event of a power disruption, and a 375 kW natural gas/digester gas cogenerator operating continuously. Design of the cogenerative building employed sound-attenuating architecture.

While the heart of the project involves an innovative approach, the core of Ravensview is the Biological Aerated Filters (BAF), a newer technology to North America. Within the BAF the challenge is to minimize energy consumption while improving the treatment processes and increasing treatment capacity by 30 per cent – three elements of paramount importance to the enduring success of the expansion.

Aeration systems in waste water treatment typically are large components of a wastewater treatment plant. "Compersor technology was mostly unchanged from the 1930s to 2000," explained Mr. Lucas. "About a year ago, we decided on new compressor technology. As a result, we'll be installing four turbo blowers, which will make this the biggest installation in Canada."

The new technology will save 40 percent in energy consumption compared to older systems, and will pay for itself in fewer than four years.

"In one configuration or another, the blowers run constantly, so installing a system requiring less energy and maintenance is a huge step forward in environmental stewardship."

The turbo blowers are part of the new BioStyrene process, supplied by John A. Mcعين Inc. Used at the secondary treatment stage, the system combines biological degradation with clarification of the water in a single cell.

Water is filtered upward through bio-styrene, a granular material resembling small Styrofoam pellets, which float when immersed. Air is injected through jets — in Ravensview's case 77,000 of them — to maintain circulation of the granular media. As water circulates, the pellets capture biological pollutants. The system stores an upper zone for periodic backwashing to remove excess biomass and retained solids.

Within a compact footprint important on Ravensview's restricted site - BioStyrene biofiltration combines a biological reactor to degrade soluble pollutants and a separation phase to remove biomass and particulate pollutants.

This is more than a capacity upgrade, and through BAF technology, Ravensview will incorporate industry leading special filters that will remove more contaminants, including ammonia, previously difficult to eliminate.

In recent years, greater emphasis has been placed on the importance of incorporating secondary biological treatment that will eliminate or neutralize the undesired effects of exotic contaminants often found in sewage.

Facilitating installation of new technology is a tremendous amount of intensive labour. In total, 45,000 cu. m of rock were drilled, blasted, removed, crushed, and stored on-site for use as backfill, resulting in lower transportation and material costs and a decreased carbon footprint.

The expansion will require 16,000 cu. m of concrete, or about 2,000 loads, and over its duration, will represent 325 worker-years of labour, often with more than 100 workers on site.

The two 1950s-era primary clarifiers, or settling tanks, need modification. "Designed with covers on them, they were totally enclosed because engineers at the time had no way to predict odor levels," said Mr. Lucas.

Completely encapsulated, maintenance was all but impossible. To make the tanks more accessible, workers removed huge pieces of the concrete cover, requiring substantial planning.

The tanks were emptied, one at a time, and chocked to bedrock to prevent them from floating. That led to another challenge. "One of the biggest successes is the co-ordination of continuous operations and service during construction," emphasised Mr. Lucas. "Jeff Frouot from Utilities Kingston handled that with excellence. There are so many intricacies on a project this size and we don't have the option of even a brief interruption in service."

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Upgrades to the Ravenson Water Pollution Control Plant represent the most costly municipally funded capital project in Kingston’s history. The three-year, $115 million undertaking, slated for completion in 2009, incorporates one of North America’s largest BioStyrt® Biological Aerated Filter (BAF) installations, benefits from the complete overhaul, which increases capacity by one-third, involve far more than sewage treatment infrastructure – they set a new standard in environmental stewardship, cost management practices, and community care. From first screening to final treatment, the Ravensview expansion is designed to decrease odour, noise, air pollution, and energy consumption while treating 30 per cent more waste water, up to 95,000 cubic metres per day (cu. m/d).

City officials and construction partners wanted to do more than simply bring the 50 year old plant into the modern era and beyond. Despite a larger capacity, they demanded a decreased environmental impact, improved air and water quality, increased noise abatement, energy efficiency, and superior biosolids handling.

Continued on Page 3
Not yet content, senior management partners recognized there had to be a guaranteed legacy combined with an immediate impact on Kingston's citizenry, particularly those who were most in need.

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Agreement Steering Committee

Canada – City of Kingston Ravensview Water Pollution Control Plant Project
Under the Canada Strategic Infrastructure Fund (CSIF)

Agenda Meeting #11
October 24, 2008 – 10:00 a.m.
Ravensview Environmental Centre Site Trailer – 947 Highway #2
Kingston, Ontario

1. Opening Remarks
2. Appointment of New Members to the ASC
3. Approval of Minutes (Meeting #10- March 4, 2008)
4. Approval of Agenda
5. Finances/Audit/Claims
6. Communications Protocol/Signage
7. Project Update by Kingston
8. Environmental Protection Plan Update
9. Review of Schedule A
10. Timelines for Annual Report, Audit Report
11. Other Items
12. Next Meeting

*The Meeting will be followed by a tour of the Ravensview Water Pollution Control Plant if parties are interested.*
Agreement Steering Committee (ASC)

Minutes of Meeting #11
October 24, 2008 – 10:00 am
Utilities Kingston Offices – John Counter Blvd.
Kingston, Ontario

Committee Members Present
S. Badhwar, Director, Infrastructure Operations, Canada-Ontario Infrastructure Program, Industry Canada (Federal Co-Chair)
P. Bennett, Analyst, Program Operations, Intergovernmental Operations Directorate, Infrastructure Canada
J. Keech, President and C.E.O., Utilities Kingston (City Co-Chair)

Others Present
L. Hann, Manager, Communications, Canada-Ontario Infrastructure Program, Industry Canada
A. Lucas, Utilities Engineer, Utilities Kingston (Technical Project Manager)
D. Kennedy, Director Financial Services, City of Kingston

Regrets
G. Hunt, Commissioner, Finance and Corporate Performance, City of Kingston (City Member)

Recorder
C. Belanger, Assistant to the President and CEO, Utilities Kingston

1. Opening Remarks

The Meeting was chaired by J. Keech, President and CEO, Utilities Kingston. There was an introduction of members as there have been various changes including the retirement of B. Booth.

2. Appointment of New Members

S. Badhwar, Industry Canada was appointed as Federal Co-Chair upon the retirement of B. Booth.

3. Approval of Minutes (Meeting #10 – March 4, 2008)

The minutes from meeting #10 were approved as presented.
4. **Approval of Agenda**

The agenda was approved as presented with the addition of the following items:

- Project closure process
- Ribbon Cutting Event for the plant – establish timelines

5. **Finances/Audit/Claims**

D Kennedy reported she has been working with L. Hann to reconcile claims. Currently Claim #6 is still outstanding, however the numbers are almost reconciled. Claims 7 and 8 are ready to send in. Based on numbers, Claim 8 should take the project to $22.5M (90% of the grant funding).

There remain 2 outstanding issues:

1) **Discrepancies in the total on Category 4 and Category 1**

   There remains a discrepancy amount of $33,000 showing in Category 4 and Category 1. The group was reminded the minutes of Meeting #3 (February 9, 2006), which was approved in Meeting #4, addressed this amount and at that time, the federal group would check to see if the funding agreement needed to be re-signed by the Minister.

2) **In May 2007, there was no re-signing of the schedule.** A copy of the proposed amendment to schedule (from L. Battaglia/L. Hann) was included showing re-allocations. There was considerable change to component 4 ($1M of the $25M federal share being re-allocated). D. Kennedy provided the federal group sufficient background to justify this discrepancy. It was recommended that the Agreement Steering Committee is in favour of the proposed amendment and to put it forward for changing.

   A. Lucas advised the group that at Meeting #3 when L. Cistera was the Federal Co-Chair, monies could not be moved without ministerial approval. It was considered acceptable for the ASC to approve the re-allocation.

   P. Bennett will email the ASC the response if we can proceed with this and will confirm that at Meeting #3 it was acceptable to proceed.

   L. Hann advised to go ahead and submit the next 2 claims for processing to get reviewed as soon as possible.
It was questioned why the facility was not proceeded as planned. A. Lucas explained the details of the septage receiving facility being pulled from the schedule.

An additional concern from the City’s perspective related to cash flow. D. Kennedy advised that the cash flow was at 50% of the first 2 claims, while some were at 33.3%. These were based on proportions of Schedule A with an average cash flow of 35%. The concern arises when completing the final reporting as there will be differences in the percentage of funding (particularly Category 1). L. Hann advised we will require an adjustment to max out at Category 1 eligible costs, which can be arranged.

Audit
The Audit has been completed and filed for March 31, 2008. We will proceed for March 2009 for the final audit. The $2.5M holdback will not be released until mid-February 2009 which will be ready to be claimed in April 2009. It was advised that in order to release the final holdback, the final report and external audit must be completed.

6. Communications Protocol/Signage

A. Lucas reported the draft version of the plaque has been distributed for comment. We will have the City communications staff coordinate with the Federal communications staff.

The intent is to display the plaque in the Biosolids Aerated Facility (BAF) in the main entrance which is also the Training Centre.

A. Lucas also reported Municipal World Magazine, November 2009 edition has a multi-page article on Ravensview. This publication is circulated across Canada and has drawn attention from various groups worldwide. There was recently a tour group from Harbin Province, China as they also purchased the Secondary Treatment Process. Additionally, there have been tours involving Shanghai University, McGill University and there is interest from another group from Shanghai, China.

7. Project Update by Kingston

A. Lucas reported we continue to distribute monthly reports. There are some final deficiencies to address involving the screening and grit removal system, however, the system is running.
The Primary clarifiers have been upgraded and there are minor deficiencies. The Secondary Treatment Process (BAF) has been running since September 7, 2008 and produces ultra-clean water. While the facility is at 95% completion, there are still some finishing components to address and therefore it has not been turned over to Utilities Kingston for operations yet. The new digester has some additional repairs required. The de-watering building is constructed, tested and ready for commissioning. The storage building was pulled out of the project. The Cogeneration System and back up power is complete but was not part of the original funding.

We are well ahead of initial timelines at 9 months ahead of schedule and a target for substantial completion of December 2008 for performance with approximately $900,000 left of work at that time.

We anticipate full project completion by June 2009.

With regards to final reports, L. Hann advised a final report in June would suffice. In terms of audits, both L. Hann and S. Badhwar were agreeable to do a 15-month audit report as opposed to a fiscal year-end audit and another upon completion.

8. Environmental Protection Plan (EPP) Update

A. Lucas advised we continue with weekly inspections. While the EPP individual has moved off-site, he will continue his role and document weekly inspections. The facility is also currently seeking Leadership in Energy and Environmental Design (LEED) certification and we are working with a contractor who is experienced with LEED.

9. Review of Schedule A

A discussion regarding Schedule A was addressed in Agenda Item 5 – Finances/Audit/Claims.

10. Timelines for Annual Report, Audit Report

The draft reports will be distributed for review prior to printing.

11. Other Items

Project Closure Process
P. Bennett explained there are many steps in closing a project under the Canada Strategic Infrastructure Fund (CSIF). Some of the steps can occur in tandem with others. P. Bennett will send out for review what is involved. While the guide may
change in the next few months, we can consider the interim information as the
guide to follow.

**Ribbon Cutting Event**

The group was questioned on what is required from a federal point of view when
planning the final event. S. Badhwar suggested having the federal communications
staff work with Utilities Kingston staff. It would be beneficial to have advance
notice so arrangements can be coordinated with the Minister.

J. Keech requested that the federal communications staff coordinate with C.
Belanger. Utilities Kingston will handle the logistics of the event with the federal
and provincial staff assisting.

It was also suggested for thought, that if there was an event involving international
visitors, we could capitalize on the exposure.

**12. Next Meeting**

It was agreed only one or possibly two more meetings would be required. For the
next meeting, we will need to talk about the Ribbon Cutting Event.

It was recommended that the next meeting take place on Friday, March 6, 2009 at
11:00 a.m. at the Ravensview Training Centre.

Meeting adjourned at 11:20 a.m.
Biological Aerated Filter Construction
Construction of Pumping Station
(located in SE corner of BAF)
Construction of One Additional Digester
Improve Chlorination/ De-Chlorination
Grit Removal Improvements
Grit Removal Improvements (con’t)
RAVENSVIEW WASTEWATER TREATMENT PLANT
FORMERLY
RAVENSVIEW WATER POLLUTION CONTROL PLANT

2009-2010
FINAL ANNUAL REPORT
Project Completion Report

The recipient draws from information in the Final Annual Report to prepare a Project Completion Report including:

a) the amounts and the sources of all Project funding;
b) all costs of the Project;
c) all Eligible Costs incurred for the Project;
d) all outstanding financial items, including any amount that may have been claimed by the City for ineligible expenditures;
e) any Eligible Costs incurred but not paid at the time;
f)* confirmation that the terms and conditions of the environmental Approval have been implemented;
g) attestation by the City that all elements of the Project were completed;
h)* an explanation of any variances from any estimate provided during the application process;
i)* outputs and benefits achieved compared to those planned, including any unexpected benefits;
j) any issues raised in the final audit report and related adjustments, if necessary;
k) the Project sustainability plan;
l) a final result statement.

INTRODUCTION

The Ravensview Wastewater Treatment Plant, formerly referred to as a Water Pollution Control Plant, provides sewage treatment for the central and eastern portions of the City of Kingston. Prior to this upgrade the facility provided enhanced primary treatment. The treated water from the plant met the current quality limits for secondary biological treatment plants. In 1992 when the last expansions were planned, the first phase was approved and constructed which improved the treatment at the time and provided additional capacity for growth. The second phase of the project, which included plans for secondary treatment, was deferred to the future.

In 2003 Utilities Kingston and the City of Kingston sought financial assistance from various levels of government to upgrade the treatment capabilities of the plant. In July 2003, the federal government announced it would participate in funding of upgrades to the plant with up to
Detailed Project Status

Utilities Kingston, through the design engineering team lead by J.L. Richards and Associates, Kingston Office commenced the fiscal year having completed in 2009/10 about $X,000,000 worth of construction and ongoing engineering quality control, inspection and contract administration.

In the current fiscal year, approximately $14,508,000 was expended in construction completion, release of holdback, engineering quality control, inspection and contract administration.

Specifically, the following components’ are listed:

- Site services - 100% complete
- Rock removal - 100% complete,
- Grit removal system - 100% complete,
- Primary clarifier upgrades - 100% complete,
- Biological Aerated Filters - 100% complete,
- Digester complex and new Digester - 100% complete, and
- Biosolids management - 100% complete.

Overall, at fiscal year end, the project is 100% constructed with 100% of the overall construction budget expended or allocated. All areas are deemed complete, except rectifying minor deficiencies and the combined heat and power generation digester gas cleaning system (which is an unfunded component of the project). As at March 31, 2010, the contractor has not applied for a completion certificate as they are waiting to apply once remedying issues with the digester gas cleaning system, noted above, are complete. The City of Kingston is likewise awaiting this to provide the project completion certificate.

Environmental Issues

The Ontario Ministry of Environment issued an updated Certificate of Approval for Ravensview dated 11 January 2005. The plant operated in compliance with the Certificate of Approval. Of note, the Biological Aerated Filters (BAF) were under commissioning beginning early September 2008, with the secondary treatment process fully started up on February 20th, 2009 following a final three day testing. On the monthly average table and as shown on the graphs, the resulting improvements in the reduction of the 5 day Carbonaceous Biological Oxygen Demand (CBOD5) and Suspended Solids is evident. The level of phosphorus remains relatively constant, however the change from using only ferric chloride for removal to relying on the biological uptake in the BAF has resulted in a significant reduction of chemical addition. Much cleaner effluent water has enabled a reduction in chlorine used for disinfection. A summary of the annual and monthly averages are presented in the following tables and figures.
### Table 1
Effluent Limits/Results

<table>
<thead>
<tr>
<th></th>
<th>Concentration in Effluent</th>
<th>Total Loading from Effluent</th>
<th>2009 Annual Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBOD/5</td>
<td>25.0 mg/l</td>
<td>2,375 kg/d</td>
<td>9.6 mg/l 647 kg/d</td>
</tr>
<tr>
<td>Suspended Solids</td>
<td>25.0 mg/l</td>
<td>2,375 kg/d</td>
<td>3.7 mg/l 249 kg/d</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>1.0 mg/l</td>
<td>95 kg/d</td>
<td>0.45 mg/l 30.0 kg/d</td>
</tr>
<tr>
<td>Total Chlorine Residual</td>
<td>0.04 mg/l</td>
<td></td>
<td>No occurrences over 0.04</td>
</tr>
<tr>
<td>E. Coli</td>
<td>200 counts/100 mL</td>
<td></td>
<td>19.3</td>
</tr>
<tr>
<td>pH</td>
<td>maintained between 6.0 to 9.5</td>
<td></td>
<td>7.14</td>
</tr>
<tr>
<td>2009</td>
<td>Limits</td>
<td>Jan</td>
<td>Feb</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Avg. Flow cu.m/day</td>
<td>95 000</td>
<td>64 171</td>
<td>75 690</td>
</tr>
<tr>
<td>Max. Flow cu.m/day</td>
<td>193 000</td>
<td>71 539</td>
<td>127 659</td>
</tr>
<tr>
<td>Average CBOD5 mg/L</td>
<td>25.0</td>
<td>5.8</td>
<td>6.5</td>
</tr>
<tr>
<td>Average CBOD5 Loading kg/d</td>
<td>2375</td>
<td>369</td>
<td>492</td>
</tr>
<tr>
<td>Average SS mg/L</td>
<td>25.0</td>
<td>3.3</td>
<td>1.5</td>
</tr>
<tr>
<td>Average SS Loading kg/d</td>
<td>2375</td>
<td>212</td>
<td>114</td>
</tr>
<tr>
<td>Average TP mg/L</td>
<td>1.0</td>
<td>0.62</td>
<td>0.65</td>
</tr>
<tr>
<td>Average TP Loading kg/d</td>
<td>95</td>
<td>40</td>
<td>49</td>
</tr>
<tr>
<td>Chlorine Used kg as Cl2</td>
<td>4 108</td>
<td>3 987</td>
<td>4 784</td>
</tr>
<tr>
<td>Dosage mg/L</td>
<td>2.07</td>
<td>1.88</td>
<td>1.93</td>
</tr>
</tbody>
</table>

Table 2

Monthly Average Effluent Flows, Concentration and Loadings
The new Certificate of Approval requires future changes in monitoring and analysis. Of particular note is the requirement for the plant to comply with the testing for “non-toxic effluent” with respect to chlorine and ammonia in the water discharged to the receiving waters, six months after the secondary treatment process is commissioned. This condition is consistent with the CCME Municipal Wastewater Effluent Strategy. Compliance testing for this commenced in May 2009. All test results were reported that the discharge to the St. Lawrence River meets the non-toxic effluent criteria.

At present, chlorine is used for disinfecting the treated water and then a chemical is added to dechlorinate immediately before discharge. This process will be continued after the upgrades are complete as approved. Removal of ammonia is done within the biological secondary treatment processes and therefore will not be required to be met until after completion of the upgrades. Both of these requirements will be confirmed through regular biological testing, initially on a monthly basis.

Infrastructure Canada has determined, in accordance with subsection 20(1) of the Canadian Environmental Assessment Act (CEAA), that the impact of this project on the environment is not likely to cause significant environmental effects if it proceeds under the following conditions:

- Requirements for mitigation and monitoring specified in the report must be implemented in a timely manner.
- All other environmental permits and licenses must be obtained in a timely manner and work must be carried out in accordance with any conditions specified therein.

Site specific mitigation measures during the construction phase were implemented in accordance with the submitted Environmental Protection Plan. The contractor was responsible for the environmental management requirements for those areas under its control. Monitoring and regular reviews were completed and documented by Utilities Kingston Environmental Protection Lead, with the contractor and the engineering consultant in attendance for construction contract administration purposes.

There were no issues of environmental significance during the project. Minor concerns with respect to blasting and mud tracking off the site were raised by the public. Blasting efforts were strictly controlled which mitigated concerns. Ongoing efforts were undertaken by the contractor to minimize offsite tracking of materials.

All permits and approvals required for the construction of the Ravensview Wastewater Treatment Plant Upgrades have been applied for and received. Ongoing compliance monitoring is provided on an annual basis to the Ontario Ministry of Environment in accordance with the Certificate of Approval.

**Benefits**

The Ravensview Wastewater Treatment Plant sewage works have functioned well over the years with basic improvements. This is testimony to the ability of the staff and functionality of the
original engineering designs. The basis and support for the need to plan and implement upgrades now is, as defined by the Ontario Ministry of Environment (MOE) primary purpose of plant Certificates of Approval, to:

1. Protect human health and the environment by preventing potential harmful effects.
2. Require a facility to conform to generally accepted engineering practices with the potential to operate reliably.
3. Provide minimum requirements for compliance with Ministry standards as set out in acts, regulations, policies, objectives and guidelines.
4. Outline minimum responsibilities of facility owners and operators.

In addition to these direct benefits, the project as it is constructed will have additional benefits to the local municipal economy. There will be significant direct employment of construction trades during the latter part of 2006 through to completion in 2009 with up to 100 or more trades people and labourers on site. There is an expectation that while some of the workers will be local, a large number will be from out of town and will require a range of support and services.

Inclusion in 2004 of the design of combined heat and electrical power generation facilities, commonly called cogeneration, with the methane gas from the treatment plant as a fuel source will position Kingston well in reducing greenhouse gas emissions. The design was completed and includes a 375 kilowatt generator that is capable of blending the digester gas with piped natural gas as the primary use of the digester gas. During times when the unit is out of service for maintenance, the digester gas will be used as a fuel to the boilers or in emergency flared off.

Other Issues or Risks

There are no other issues at this time which should affect the original timelines for completion and budget for the project.

Budget Update

The budget for the project is currently estimated at $116,325,000 in 2006 dollars, updated from the $102,842,000 (based on 2004 dollars). The pre-tender estimate for the construction contract was reported in the 2005/06 Annual Report as $95,000,000, including contingencies, specific construction allowances and taxes. The construction tender received and accepted was $83,100,000 including contingencies, allowances and taxes. The balance of the project budget includes money already expended for the Environmental Assessment, geotechnical studies, hydrogeological studies, archaeological studies, ecological works, preliminary engineering design, pilot testing, detailed engineering design, pre-approved equipment drawings, allowances for equipment supplied outside of Contract UK E06-01, permit fees and staff costs.

Throughout the project the value was monitored and assessed to address any unforeseen conditions or other necessary changes such as inflation, fuel increases and other construction cost increases.
The audit report to March 31, 2010, provided under separate submission was completed by KPMG. There were no issues noted.

The planned and actual expenses for the project, as funded under the Canada Strategic Infrastructure Fund are broken down in the following table.

<table>
<thead>
<tr>
<th>Project Component</th>
<th>Total</th>
<th>Forecast Expenditures 2009-10</th>
<th>Actual Expenditures ending 2010/03/31</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct Biological Aerated Filters for Secondary Treatment</td>
<td>$54,901,604</td>
<td>$6,949,000</td>
<td>$8,691,286</td>
<td>$(1,742,286)</td>
</tr>
<tr>
<td>Construction of Pumping Station</td>
<td>$5,712,855</td>
<td>$270,000</td>
<td>$1,303,396</td>
<td>$(1,033,396)</td>
</tr>
<tr>
<td>Construction of One Additional Digester</td>
<td>$14,631,479</td>
<td>$1,157,000</td>
<td>$1,303,396</td>
<td>$(146,396)</td>
</tr>
<tr>
<td>Construct Septage Receiving Facility</td>
<td>$33,500</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Improve Chlorination/ De-Chlorination</td>
<td>$1,845,923</td>
<td>$60,000</td>
<td>$434,465</td>
<td>$(374,465)</td>
</tr>
<tr>
<td>Headworks and Grit Removal</td>
<td>$7,518,758</td>
<td>$1,100,000</td>
<td>$868,931</td>
<td>$231,068</td>
</tr>
<tr>
<td>Primary Clarifiers</td>
<td>$5,637,818</td>
<td>$400,000</td>
<td>$1,013,753</td>
<td>$(613,753)</td>
</tr>
<tr>
<td>Boilers and Heat Exchangers</td>
<td>$5,002,500</td>
<td>$300,000</td>
<td>$871,976</td>
<td>$(571,976)</td>
</tr>
<tr>
<td>Audit, Communication and Evaluation</td>
<td>$100,000</td>
<td>$0</td>
<td>$20,791</td>
<td>$(20,791)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$95,384,285</strong></td>
<td><strong>$10,326,000</strong></td>
<td><strong>$14,507,997</strong></td>
<td><strong>$(4,271,997)</strong></td>
</tr>
</tbody>
</table>

Table 3  
Project Funding Breakdown
During 2009/10, the planned expenditures, as per the funding agreement, were allocated for construction holdback release, completion of outstanding seasonal works, and engineering quality assurances and testing. Additionally, some direct equipment purchases by Utilities Kingston for incorporation into the project were completed.

The funded project components were reviewed by the Project Steering Committee. The estimates were not adjusted during the year as the allocations were believed to fairly represent the proportional costs within this agreement as compared with the overall project costs. Given the current state of construction and current financial review, the Project Steering Committee will need to review the allocations and the method of assigning by proportion the costs and consider reallocating.

Currently the project overall is within the City of Kingston’s expected budget for the project. The project includes activities not funded under the agreement, enclosed biosolids storage/handling facility and electrical co-generation. The overall project target budget was increased in 2006 to $116,325,000 to account for supply and construction cost increases.

Risk Management

An Environmental Protection Plan, including emergency response measures and risk management has been developed based upon the Canadian Environmental Assessment Screening Report. The plan incorporates Standard Operating Procedures for the plant and requirements within the construction contract. In addition, the selected contractor will be required to provide a site specific environmental management plan which will include measures as specified in Section 01561. This was issued June 8, 2006 to the Steering Committee and a copy provided to Environment Canada. In addition, the Ravensview Environmental Protection Plan has been provided for reference to the City of Kingston Environmental Division and the District Office of the Ontario Ministry of Environment.

COMMUNICATIONS ACTIVITIES COMPLETED DURING THE FISCAL YEAR

The following table provides a list of all communications referencing the project site in Fiscal Year 2009-10. Copies of all press releases and a summary of the news articles are included in Appendix B.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 28, 2009</td>
<td>Editorial Page - “Councillors self-serving in blocking electoral reviews”</td>
<td>The Kingston Whig-Standard</td>
<td>Gardner Church - Kingston</td>
</tr>
<tr>
<td>August 15, 2009</td>
<td>Lifestyle - “Ravensview and Partners in Mission Food Bank Grass roots project partnering a first for Utilities Kingston”</td>
<td>The Kingston Whig-Standard</td>
<td>Catherine Stutt</td>
</tr>
<tr>
<td>August 15, 2009</td>
<td>Lifestyle - “From the desk of Jim Keech President and Chief Executive Officer, Utilities Kingston”</td>
<td>The Kingston Whig-Standard</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
<td>Location</td>
<td>Party</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------------------------------------------------------</td>
<td>---------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>August 15,  2009</td>
<td>Lifestyle - “The psychology of sewage: Ravensview 101 The Quality of Life”</td>
<td>The Kingston Whig-Standard</td>
<td>Catherine Stutt</td>
</tr>
<tr>
<td>August 15,  2009</td>
<td>Lifestyle - “Ravensview Wastewater Treatment Plant; Kingston’s World Class Environmental Centre”</td>
<td>The Kingston Whig-Standard</td>
<td>Catherine Stutt</td>
</tr>
<tr>
<td>August 15,  2009</td>
<td>Lifestyle - “Ravensview’s Construction and Community Liaison Committee – yes in our backyard”</td>
<td>The Kingston Whig-Standard</td>
<td>Catherine Stutt</td>
</tr>
<tr>
<td>August 2009</td>
<td>“World Class Water Treatment Facility Unveiled at Ravensview”</td>
<td>Kingston This Week</td>
<td></td>
</tr>
<tr>
<td>Fall 2009</td>
<td>“Ravensview Wastewater Treatment Plant – The City of Kingston takes a giant step in environmental stewardship”</td>
<td>Construction Matters</td>
<td>Catherine Stutt</td>
</tr>
<tr>
<td>October 15,  2009</td>
<td>Editorial/Opinion - “Will history making Speaker soon be part of riding’s history?”</td>
<td>The Kingston Whig-Standard</td>
<td></td>
</tr>
<tr>
<td>October 21,  2009</td>
<td>Editorial/Opinion - “Letters to the editor”</td>
<td>The Kingston Whig-Standard</td>
<td>David Rankine, Kingston</td>
</tr>
</tbody>
</table>

Table 4
Media Coverage

**Agreement Steering Committee Meetings**

Project Steering Committee Meeting was held on August 14, 2009. The meetings were to review the requirements and actions for the Committee. A copy of the agenda and meeting minutes are included in Appendix C.

**Additional Information**

Select photographs for the project have been provided with the regular monthly project updates. Included in Appendix D are some additional photographs which depict the overall progress of construction over the entire project.

Through the initial construction phase there has been no significant public concerns raised. Concerns were raised by three properties located east of the site with respect to low water wells. A thorough investigation by the hydrogeological engineer and the City’s claims adjuster, both of which determined the very dry summer of 2007, not this project, was the cause of the issues. A fourth property, located south of the BAF, had raised concerns with poor water quality attributing the problem to the construction. Temporary bottled water was provided while this was thoroughly investigated. As the evidence did not conclusively refute the claim Utilities Kingston worked with the lease to supply and install a filtration system to rectify the concerns. The City of Kingston, being the property owner, and has requested a sign off from the lease-holder.
The “Construction Public Liaison Committee” was formed, consisting of local residents who participated previously during the Environmental Assessment. This group of concerned individuals provided front line communications back to the City for issues concerning residents. The group of individuals who dedicated their own time to assist, were instrumental in ensuring the local residents issues or concerns were heard and also provide good contacts.

Through the project website and newsletters, the public have been invited to subscribe to an e-mail list to receive updates. This tool has worked well in providing short notice and timely information to a broader audience.

The Municipal Council members were kept informed of the works through briefs and progress reports. The progress report is reviewed by the project’s Senior Management Team who meet generally on a monthly basis to track issues.

**Appendices**

The following appendices form part of the Annual Progress Report:

- Appendix A: Project maps
- Appendix B: Press releases
- Appendix C: Management Committee Meetings Agenda and Minutes
- Appendix D: Project photos
Project Work Components Plan
CSIF 2007-08 Annual Report
Appendix B

Press Releases
Milliken has delivered plenty for Kingston and the Islands.

This is to set the record straight on the rhetorical question posed in the Oct. 15 editorial "Will history-making Speaker soon be part of riding’s history?" The editorial asked how often House of Commons Speaker Peter Milliken uses his influence in Parliament to "to get things done for Kingston and the Islands."

In the past three years alone, our community has benefitted from the following federal contributions:

* $59 million for the Wolfe Island wind project;
* $115 million for the Ravensview water treatment plant upgrade;
* $9.1 million for the National Centre of Excellence in Green Chemistry;
* $1.6 million for upgrading our airport, and $11 million each for local infrastructure projects in conjunction with the Ontario government;
* $2 million for repairs to, and the rehabilitation of, the LaSalle Causeway;
* $400,000 that helped match eligible public-sector and private-sector businesses with students seeking employment this past summer;
* $2.7 million for upgrades to the historic Grand Theatre;
* $15 million for the Tett Centre;
* $29 million for Queen’s medical school;
* $12.52 million for studies and medical research conducted in Kingston;
* $300 million for upgrades to buildings used to train and house military personnel at Royal Military College and Canadian Forces Base Kingston.

Over the past two decades, few, if any, other ridings in the country have been as consistently well served by a member of Parliament who tirelessly, quietly and effectively brought to the attention of federal decision-makers local projects that were worthy of their support, regardless of which party was in power.

The flow of federal funding is important for job creation, research and innovation, and quality of life. No less important is Milliken’s role in helping constituents who have serious problems relating to such federal departments as the Canada Revenue Agency, Service Canada and Citizenship and Immigration. Kingstonians know that he and his office staff are always available to advocate for, and help them on, any of these or other federal questions or concerns.

Ron Hartling
President Kingston and the Islands
Federal Liberal Association

We should celebrate the diversity of our religious traditions

I appreciated the way in which Alia Hogben highlighted a number of inclusive passages from the Quran in her column "No one religion can claim to have monopoly on truth" (Oct. 17). She also asked, rhetorically, "Is it all right to have a smorgasbord of religions from which we can choose whatever elements we like?"

Although the author did not, many who believe in following rigid doctrines try to use that question, or others like it, to dismiss those who have a more inclusive spirituality. In reality, all they are doing is demonstrating their own lack of knowledge about their religious history. Has a year gone by when papers like the Whig, come December, haven’t run articles about how traditions like the yule log, the Christmas tree -- or, well, pretty much everything that we consider representative of “Christmas” -- were borrowed from other religions?

Rather than cling to the idea that faith is unchanging and exclusionary, we should celebrate the incredible, ever-changing diversity that God has used to express creation and our relationship with the divine. The spectrum of perspectives expressed in our sacred texts, and in the writings of religious scholars and mystics over thousands of years, is only part of the story. We must add our own understanding -- our own story. Science and the exponentially expanding knowledge of how the universe works must be part of the narrative.

Never before, as Hogben notes, has the world seemed so small. Nor have our interaction with each other and the planet been so great, or our impact on one another so profound. And while our various beliefs do indeed have significant differences, underlying all is a universal governing principle -- to treat others, and the world, as we would be treated. Or, as Google would have it, to “do no evil.”

What better indication of a universal unity within our diversity than to find a principle so essential to our survival embedded in everything from the most ancient texts to the most modern ethics; from social
convention to even the genetic code that urges us to co-operation and altruism?

Smorgasbord indeed. And an abundant one it is.

David Keating Kingston

Plaques don't choose sides; they only mark key historical events

The recent decision to not publicly recognize the historical significance of Gen. James Wolfe is a prime example of how present-day policy decisions are made without adequate knowledge of our history, especially local history. Gen. Wolfe was a well-known and controversial figure who was very significant in our nation's development. So, too, was Comte de Frontenac, who, in July 1973, was recognized as one of the "most influential and controversial figures in Canadian history" by Queen Elizabeth II during Kingston's tercentenary celebrations as she unveiled the plaque that still stands in Confederation Basin.

Plaques do not interpret history, nor do they choose sides. Rather, they present us with information of historical importance and significance. That's it -- nothing more.

David Rankine Kingston

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If ever a person was born to do a particular job, Peter Milliken was born to be Speaker of Canada's House of Commons.

It's a job he loves, one that, in a sense, he's been preparing for since his teenage years. While other kids were listening to the latest rock bands or hanging out at Lake Ontario Park, young Peter was reading Hansard, the official record of parliamentary proceedings, and familiarizing himself with how Parliament worked.

It served him in good stead. The Kingston and the Islands MP was elected Speaker on Jan. 29, 2001, and has been in the position ever since, making him the longest-serving Speaker ever. It's an historic achievement for a man who represents a city steeped in history.

Some argue that this riding suffers for having its MP sitting in the Speaker's chair. The Speaker's duties, critics say, make it difficult for Milliken to be an effective MP. Milliken says his position gives him influence with the government that a garden-variety MP could never have.

Maybe so, but how often does he use that influence to get things done for Kingston and the Islands? At a meeting of the Whig-Standard's Community Editorial Board during the last election campaign, Milliken had to go back almost a decade to recall his last major accomplishment for the riding: securing federal funding for the Ravensview sewage treatment plant upgrade.

During that 2008 campaign, Milliken made an ambiguous comment about his political future, one his opponents jumped on. With a federal election expected this fall or next spring, he is leaving no doubt about his plans this time. He will run again and, if re-elected, he wants to keep the Speaker's job.

The hardest part may be getting re-elected. Milliken's margin of victory has been falling in the past few elections. Moreover, public opinion polls show the Conservatives with a healthy lead over Milliken's Liberals, a party that appears to be in disarray. If the Conservatives and second-time candidate Brian Abrams run a strong campaign in this riding, Milliken could be in trouble.

After the next federal election, maybe -- just maybe Peter Milliken will have to find a new job.
Wild Art;

Illustrations: 1. Mayor Harvey Rosen congratulates Utilities Engineer Allen Lucas and the leadership of the Ravensview project during a site tour.

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The Kingston Whig-Standard

Ravensview's Construction and Community Liaison Committee -yes, in our backyard;

When Roland and Marianne McCaffrey moved to Pittsburgh Township more than 25 years ago, they knew they found a home in a peaceful well-established community overlooking open fields leading to the St. Lawrence River.

The Ravensview subdivision, named after Mr. Raven, who developed the parcel of land about 60 years ago, is still a popular family-oriented neighbourhood. "We're relative newcomers," smiled Mr. McCaffrey, just returning from walking his dog Murphy through the adjacent meadow. "People move here and stay. Their children look for property here, and we even have a third generation family."

The McCaffreys knew they adopted another neighbour as well - Kingston's primary wastewater treatment plant, their immediate neighbour to the east. Prevailing winds being what they are, the McCaffreys experienced no problems with odour and noise, but commiserated with the neighbours east of the plant.

They became concerned only when news of the upgrades and expansion hit the airwaves, wondering about the disruption a three-year construction project only a few hundred metres away would have on their quality of life. Residents of the quiet subdivision pictured 24 hour a day heavy construction traffic, blasting, banging, and general mayhem. They were admittedly sceptical when invited to a public meeting with other Pittsburgh Township Ratepayers Association members.

"I expected some sort of scam, in all honesty," recalls Mr. McCaffrey. "As soon as I arrived I met Howard Williamson, the project's communication co-ordinator. He was impressive, professional, and smooth, in a very good way, but I remained cautious about what I was going to hear. They told us we were welcome to join the Community Liaison Committee and I took them up on the invitation, figuring I'd at least know what was going on."

Still dubious, Mr. McCaffrey and several other neighbours from both sides of Ravensview attended the first liaison meeting in 2003, and were immediately impressed. "Gosh, if they weren't listening to us," he recalled with a smile.

"Not only were every single one of our concerns addressed positively, but by the time the Community Liaison Committee changed to the Construction Liaison Committee in 2006, people started dropping out because there were no problems left to address. We simply ran out of doubt and trusted the project partners to do the right thing."

At first, construction traffic was planned for the south end of Gates Boulevard, one of the two access points for the neighbourhood, and a busy pedestrian throughway for children walking to the school bus. With a simple request, a marshalling yard, parking lot, and roadway were established at the existing main entrance to the treatment plant.

Concerns about the extensive blasting and its impact on foundations and wells were alleviated, with pre-blast inspections, and groundwater monitoring.

"It was so quiet," recalled Mrs. McCaffrey. "The contractor even brought in a gravel crusher with noise abatement. You could hear the gravel running down the chute, but couldn't hear the crusher. There was no realization of the scope of work underway. It was beautifully done."

Even emergency work was done with respect for the neighbours. "There was some sort of incident in the middle of the night one time, requiring a lot of equipment. They somehow choreographed everything so the equipment was only driven forward, meaning we weren't disturbed at 1:30 a.m. with the back up alarms on the machines. In the morning, none of us knew there had been a problem."

As the project progressed, neighbours were apprised of upcoming events, including the erection and operation of the tower cranes, and new noises as processes were tested without all of the noise abatement in place.

A few times the tower crane operators went home without extinguishing the powerful spot lights. "We always had an after hours contact number, and within minutes, the lights were off and the neighbourhood was back to normal."

One day, early in the project, Mr. McCaffrey and Murphy were taking their normal walk, which included part of the treatment plant property. They...
encountered Allen Lucas, Utilities Engineer for Utilities Kingston and the project engineer. "Al asked me about a pathway, wondering where it led, and I told him nowhere, it was just somewhere my dog and I walked. Next thing I know, there are nature trails planned.

That's typical of the response we enjoyed."

The area, according to several neighbours, has unique vegetation, with stands of shag bark hickory and animal migration routes. "They protected those areas with fences," said Mr. McCaffrey.

"It's important the project partners and every contractor on the site know they have our sincere gratitude. We didn't have a single problem with anyone involved, and I strenuously encourage the City of Kingston and every municipality and project manager to adopt the community liaison committee approach. Thanks to Howard Williamson, Al Lucas, Dan LaLande (project engineer for J. L. Richards and Associates -the managing engineering firm), and Normand Fortin (site superintendent for general contractor Pomerleau Inc.) for making us feel we were an important part of this endeavour and above all, for listening to our concerns and taking us seriously."

As the final touches are put on the site, Mr. McCaffrey is proud of his neighbour. "No one is processing wastewater better than Utilities Kingston and they should be leading advocates of the entire manner in which they carried out this huge project."

"Ravensview's neighbours see it as so much more than a sewage treatment plant. The name should reflect it's truly an environmental centre, because every single stage of the project gave careful consideration to its impact on Ravensview's surroundings."

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The Kingston Whig-Standard

Ravensview Wastewater Treatment Plant; Kingston's World Class Environmental Centre;

The City of Kingston is now home to one of North America's most environmentally responsible wastewater treatment plants, and the largest of its kind in Canada. With a three-year $115 million upgrade complete, Ravensview Wastewater Treatment Plant is now returning natural resource quality water to the environment.

From its nascent stage, the Ravensview project proceeded as a committed partnership, including neighbours, academics, engineering and construction firms, and funding and charity liaisons.

The project's strongest commitment, however, was to the environment - to making one of the city's most important infrastructure installations as unimposing and efficient as possible while increasing treatment capacity by 30 per cent.

The Ravensview site is five kilometres east of the Cataraqui River. At 17.6 hectares, it is bordered by the St. Lawrence to the south and Hwy. 2 to the north. Chosen as a remote but easily serviceable site five decades ago, the city has arrived at Ravensview's door.

Commissioned in 1957, the plant remains the terminus of an intricate plan addressing civil infrastructure dating back to the 1800s. Older sections of the city still boast square stone combined sewers, typical of the day. The city grew faster than treatment technology and convention, and sewage flowed directly into the harbour.

A 1939 report recommended construction of intercepting mains and a sewage treatment plant at a cost of $500,000, which included the cost of land acquisition.

World War II delayed implementation, and the engineers updated the plan in 1950, again calling for the construction of an interceptor trunk line to run from Kingston Penitentiary, along the harbourfront, across the Cataraqui, through Barriefield, and into the new Ravensview treatment plant. The cost had risen to $3.3 million in the intervening years, and in 1957, Kingston's first sewage treatment plant began operation.

Ravensview implemented new technology over the years, first in the 1970s and again in 1994, when ferric chloride and aluminum sulphate processes were added to the treatment protocol, buying time and increasing efficiency.

Ravensview's pre-expansion average treatment capacity was 72,800 cu. m/d, but demands of this rapidly growing area were increasing, and the plant no longer met the city's self-imposed stringent environmental standards.

A dedicated effort began in 2000, identifying and addressing many issues, including challenges posed by site topography, zoning requirements, existing woodlands and residential developments, and most importantly, the non-negotiable continuing operation of the existing plant.

In August 2006, funding was in place, engineering and construction documents prepared, tenders called and answered, and a project partnership established.

Owned by the City of Kingston, Utilities Kingston is the operating authority and brought in J. L. Richards and Associates as the prime consultant. Together, the initial project partners went through the approval process and structured tender documents reflecting the spirit of Kingston council's environmental ethos, which dictates all municipal projects consider a Leadership in Energy and Environmental Design (LEED) designation. At the time, LEED did not have an industrial program, but the administration building aimed for silver LEED designation and general principles are adopted throughout the project.

Construction Liaison Group, comprised of members of the Community Liaison Group and the second was Partners in Mission Food Bank.

Helping a worthy cause in the short term balances the longer-term project goals. This Pomerleau Ontario submitted the successful construction bid of $83,100,000. Normand Fortin is the site supervisor for Pomerleau and immediately joined Allen Lucas from Utilities Kingston, and Dan LaLande from J. L. Richards in the management partnership.

Mr. Lucas describes the team-building technique as "a non-binding commitment by all parties to work co-operatively as a team in a spirit of trust and respect to achieve common goals and objectives and to promote smooth information exchange and creative problem solving."

"Partnering focuses on the strength of each participant to efficiently and safely achieve a quality
end product, on time and within budget, without unresolved disputes."

Concurrently, the team partnered with two additional groups who put the heart and soul into the project. The first was the infrastructure expansion benefits Kingston and communities downstream for decades, makes an immediate difference close to home, and impacts globally.

Ontario Premier Dalton McGuinty attended the ribbon-cutting Aug. 2, 2006. A longtime vacationer in the area, he gave the project his personal endorsement. "Building a sewage plant is not the sexiest endeavour, but without it, there will be serious effects both inside and downstream from this community. This government is helping protect the Great Lakes St. Lawrence Basin and the families who depend on it."

As the Ravensview expansion approached completion, the Premier offered his praise for a well-designed and engineered endeavour. Utilities Kingston’s aim to vastly exceed "Everyone knows sewer systems are important, but we don’t often get excited about them. Ravensview is different, though. It’s environmentally friendly, energy efficient, and uses only small amounts of chemicals to return clean water. I want to congratulate everyone who worked hard to make this important and exciting upgrade a reality."

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"The benefits of this project will have an impact for a long time," said Mr. Lucas. "Papers, procedures, community partnerships, and training -those are all aspects that other municipalities can examine and tailor to specific situations, but they’re proven and explained because we implemented them at Ravensview."

This infrastructure expansion benefits Kingston and communities downstream for decades.

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Mr. Lucas is excited about myriad positive environmental and educational aspects of the project.

"Cogeneration means reduced energy consumption; the new technology is far more efficient; we salvaged a large green space while increasing capacity; and we have reduced our impact on our neighbours by abating odour and noise. This is a benchmark for future municipal wastewater expansions."

There is a pilot project underway in association with Queen's University to develop a cost-efficient process to divert grease, oil, and fats from cooking into the digester to optimize cogeneration. The study was presented at an international conference in Singapore.

Mr. Lalande and Mr. Lucas authored a paper, Adapting Success to Quality Based Selection, which Mr. Lucas presented at the Water Environment Federation conference in San Diego. The pair selected 18 key equipment components for procurement through a value-based Request for Proposals process. Significant emphasis was placed on lifecycle costs, not simply capital costs.
Typically, sewage treatment follows a standard process where wastewater is conveyed to the plant, and screened to remove floatables, which are usually non-organic in nature. The remainder goes through another screening process to remove solids, which then have water content removed through a centrifuge. The dried biosolids are cooked in a digester to destroy pathogens. The biosolids are then removed to a storage site awaiting distribution to contractors. The liquid goes through a series of settling tanks, which separate more of the liquids from solids. The solids are routed to the digesters, the liquid progresses until it meets or exceeds effluent standards. It is then chemically treated with chlorine, and eventually repatriated with nature.

"The general public has no idea what happens when they flip the handle," noted Mr. Lucas. "For the last 50 years, the only thing between their toilets and the St. Lawrence River were these settling tanks. At one time, no one gave a second thought to overflow running directly into the river but under no circumstances is that acceptable now. We have spent and are spending virtually millions to eliminate overflow. We have to guess the worst case scenario when designing volume into the system."

In addition to population-based demand and 100-year storm predictions (a meteorological prediction of an extreme hydrologic event with a reoccurrence interval of once in a century), the engineers inherited problems from the last century.

"As soon as wastewater enters the system, it flows into sanitary sewers, many of which are deteriorating and produce a lot of grit, which makes its way with all the other materials to the treatment plant," explained Mr. Lucas.

A new automated grit auger removes grit and pumps it into a settling tank. The liquid goes back into the treatment process, and the grit and gravel are washed, cleaned, and transported to a landfill.

A third screen with a finer mesh removes more of the floatables.

A new sludge dewatering facility with two large-capacity centrifuges handles effluent faster and more efficiently, and from initial introduction to final removal from the site, the sludge centrifuges, digester gallery, and biosolids storage are enclosed.

Ravensview has three digesters operating at 37°C and a fourth anaerobic digester equipped with thermophilic capacity (operating at 55°C instead of 37°C) exceeding current biosolids management requirements. "It kills more of the harmful microorganisms and produces a virtually pathogen-free product," explained Mr. Lucas. "We're going above and beyond regulations. We're not required to take measures to this extent but we're very concerned with setting a positive example for environmental stewardship."

Once the centrifuge and digester process is completed, the dried sludge is conveyed underground to the new three-cell biosolids storage facility. It controls odour through negative pressure. Even the truck loading area is enclosed, improving quality of life for nearby residents.

Ravensview's designers wanted local satisfaction combined with a much more global impact, and the new digester helps achieve that. A higher operating temperature increases biogas production which will feed the cogeneration facility.

In its new incarnation, Ravensview requires approximately one megawatt (MW) for normal operations. This required a new 44 kilovolt (kV) line to an electrical substation, and electrical upgrades throughout the site. The cogeneration building houses two 575 kW natural gas powered generators for backup in the event of a power disruption, and a 375 kW natural gas/digester-gas cogenerator operating continuously. The cogeneration building employed sound-attenuating architecture.

While the heart of the project involves an innovative partnering approach, the core of Ravensview is the BAF, a new technology decreasing energy consumption by 40 per cent and increasing treatment capacity by 30 per cent - two elements of paramount importance to the enduring success of the expansion.

Aeration systems in wastewater treatment typically are large consumers of electricity. "Compressor technology was mostly unchanged from the 1930s to 2006," explained Mr. Lucas. "We decided on new compressor technology. As a result, we installed four turbo blowers, making this the biggest installation in Canada."

The new technology will save 40 per cent in energy consumption compared to older systems, and will pay for itself in fewer than four years.

"In one configuration or another, the blowers run constantly, so installing a system requiring less energy and maintenance is a huge step forward in environmental stewardship."
The turbo fans are part of the new Biostyr process, supplied by John Meunier Inc. Used at the secondary treatment stage, the system combines biological degradation with clarification of the water in a single cell.

Water is filtered upward through biostyrene, a granular material resembling small Styrofoam pellets, which float when immersed. Air is injected through a series of floor jets to maintain circulation of the granular media. As water circulates, the pellets capture biological pollutants. The system stores an upper layer of treated water used for periodic backwashing to remove excess biomass and retained solids.

Within a compact footprint - important on Ravensview’s restricted site - Biostyr biofiltration combines a biological reactor to degrade soluble pollutants and a separation phase to remove biomass and particulate pollutants.

This is more than a capacity upgrade, and through BAF technology, Ravensview will incorporate industry leading special filters to remove more contaminants, including ammonia, previously difficult to eliminate. In recent years, greater emphasis has been placed on incorporating secondary biological treatment to eliminate or neutralize the undetermined effects of exotic contaminants often found in sewage.

The two 1950s-era primary settling tanks were modified. "Designed with covers on them, they were totally enclosed because engineers at the time had no way to predict odour levels,” said Mr. Lucas.

Completely encapsulated, maintenance was all but impossible. To make the tanks more accessible, workers removed the concrete cover. The tanks were emptied one at a time and anchored to bedrock to prevent floating.

That led to another challenge. "One of the biggest successes is the co-ordination of continuous operations and service during construction," emphasized Mr. Lucas. "Jeff Froats from Utilities Kingston handles that with excellence. There are so many intricacies on a project this size and we don't have the option of even a brief interruption in service."

Maintaining current operations while the site is under construction is of paramount importance, but several ancillary goals are pursued concurrently. The team embraced the mission to establish Ravensview as an educational facility. The new administration has a lab and conference room just for this purpose.

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He has published more than 130 technical journal articles, supervised more than 30 graduate research theses, is a member of several national and international associations and organizations dedicated to water pollution control, is a visiting professor and scholar at universities in China, and yet Dr. Bruce Anderson remains fascinated by the average kitchen sink.

"Think about it," urged this scientist who serves as a member of the Ravensview Community Liaison Committee. "When you turn the tap in your kitchen, from the time the pure water leaves the faucet and hits the drain, in that split second, without touching anything, somewhere in mid-air, it turns to sewage."

Dr. Anderson is as much a strong advocate of environment thought as he is a professor of environmental engineering and science in the Department of Civil Engineering and the School of Urban and Regional Planning at Queen's University. He is also a Visiting Scholar at Fudan University and East China Normal University, both in Shanghai, China.

"We don't want to know what goes on inside a sewage treatment plant, but we need to give great consideration to a vital part of our infrastructure to which we contribute daily," insists Dr. Anderson. "My students love concrete and steel but sewage treatment is not sexy. The pipes are buried and the treatment plants are located away from the urban core or disguised. It's my job to engage my students, to help them understand sanitation is fundamental, and civil engineering is a public opportunity."

There's another message Dr. Anderson shares with his students. "Water is the strongest material in civil engineering. Steel and concrete support buildings; water supports societies."

Water and sewage treatment are intricately linked, explains the professor. "It's all about protecting the eco system, because they're all the same watershed and we have to have a holistic approach. In 1909, American President Teddy Roosevelt asked why we were putting sewage in the drinking water. It's still a valid question 100 years later."

Although medical professionals say sewage treatment and handling is the most important medical breakthrough in the last century, Dr. Anderson predicts an aggressive and ongoing education program is necessary to bring water and wastewater into the public consciousness and thereafter into a different mindset.

"I do a lot of teaching and research in China and comparatively, we have no problems here -there are no fish floating upside down in the river and therefore no smoking gun. When we are dealing with large sewage systems we almost have a 'what you see can't hurt you' mentality when it's just the opposite. What you can't see may kill you."

"It's all an educational process and for the most part, it's a hard sell," Anderson. "Most members of the general public are only really concerned when they hear about a combined sewage overflow, but they don't realize we're saving 16 million fish every day. They don't know discharge rates are set through The Fisheries Act to protect fish habitat and people in this area probably don't realize the upgraded Ravensview's discharge rates are far below allowable levels."

Dr. Anderson is intimately familiar with Ravensview. As part of his service commitment requirement at Queen's, he joined the Community Liaison Committee (morphed into the Construction Liaison Committee in 2006). "Turns out it's just me and the neighbours. I wasn't surprised at all. No one wants to talk about wastewater. We're opening a dialogue about something with which we're most familiar behind closed doors. It's too close to home; we're talking about personal hygiene and it makes people uncomfortable."

Citing water as a quality of life issue in developing countries, Dr. Anderson has first hand experience through his international research, noting the United Nations declared 2008 the International Year of Sanitation and 2005 to 2015 the International Decade for Action for 'Water for Life.'

"Death by water is a daily occurrence in much of the world," he said. "We don't know much about it here because of places like Ravensview. The City of Kingston should be very proud of its status as local and regional stewards of the watershed."

Involved with the Ravensview upgrades and expansion since the beginning of the project, Dr. Anderson performed testing in tandem with the selection process and applauds Utilities Kingston for its methods.

"The engineers at Utilities Kingston were considerate from the beginning. The challenge was to address needs of the public, neighbours, subscribers, wildlife, and amenities. They didn't just decide to build a new..."
plant and tear down the old one; they researched options and made wise choices."

"The selection of a biological aerated filter system was a leap of faith in terms of the technology. Immobilizing bacteria by attaching it to the micro-beads and moving the food rather than maintaining constant movement for the bacteria results in efficient and superior treatment. Each bead is home to billions of bacterial cells and delivers a huge bang for the buck. Stacking the backwash and treatment cells retains a smaller footprint which resulted in less blasting and rock removal."

Ravensview's biological aerated filtration removes a greater quantity of a larger range of contaminants, addressing another of Dr. Anderson's concerns. "A difficult sell is the emerging threat from personal care and pharmaceutical products. We can all see the solids but now those compounds are detectable at extremely small amounts. Now we know they're in the system, what do we do with them?"

The next step beyond even the most sophisticated of existing wastewater treatment requires a paradigm shift.

"We're still working with almost Romanera conveyance and disposal systems," he observed about modern wastewater processing. "There are a lot of ironies built into our current systems. We're trying to keep old pipes functional yet we've put a delicate system in the ground and buried it where we can't see it or monitor it. We size pipes to flush as much water as possible but we're supposed to be a society of conservation."

Change will not come easy nor quickly acknowledges the international expert.

"There is another huge cost to the next step. We start new thoughts with new neighbourhoods - it's generational. Sewage treatment used to be a hole in the ground and now it all flows into one large facility. We start with decentralization treating smaller volumes and higher concentrations.

We remove solids at source with biological septic systems which alleviates our need to have huge piping systems."

The key, though, is grey water recycling. "Alberta and British Columbia have grey water legislation. Can we redirect Ravensview output? Can we use Ravensview's treated water for urban irrigation? The St. Lawrence River won't miss it. It's not just about the end of the line; it's about watershed stewardship. It's about water based cities, and we're talking about all of those possibilities at Ravensview. Utilities Kingston opened this system for research."

More than six years after Dr. Anderson joined the Community Liaison Committee, he remains a strong advocate of the upgrades, and an admirer of the engineering and stewardship commitments exhibited at Ravensview.

"The prevailing thought is this is a sewage treatment facility but it's so much more. It's an educational and environmental centre."

"Ravensview is tremendously elegant."

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The Ravensview upgrade project provided the City of Kingston an opportunity to demonstrate its commitment to environmental sustainability. I believe everyone involved worked together to build a state-of-the-art wastewater treatment plant of which we can be proud. In so doing they also developed better understanding and greater relations between the community, Utilities Kingston staff, the engineering team, and the construction team.

Teamwork played a very big role, especially as we started the major part of construction. Approaching the project as a partnership, we were able to all benefit by working together to expand the plant while maintaining our ability to effectively treat wastewater throughout construction.

There were challenges to be addressed, without a doubt. One does not plan, design, and build in Canada without feeling the effects of the seasons. We understood this during our pilot testing in the winter of 2005, and throughout construction adjustments were made. The contractor had to schedule the works and modify activities accordingly, while our operations had to adapt at times as the works progressed. Overall, teamwork helped everyone manage the challenges.

A key component to the success of this project was the senior project management oversight by Utilities Kingston in conjunction with J. L. Richards & Associates Ltd. Developing and maintaining ongoing review at a senior level enabled timely updates and communication with council to ensure the expectation the project would be delivered on time and within budget was met.

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The Kingston Whig-Standard

Ravensview and Partners in Mission Food Bank Grass roots project partnering a first for Utilities Kingston;

Over the past three years the Ravensview management, contractors, and on-site skilled trades joined to raise almost $3,500 for the Partners in Mission Food Bank. "Partnering at the project level is new to Utilities Kingston; we see it as a way of giving back to the community," said Allen Lucas, Utilities Engineer for Utilities Kingston.

The initiative launched at the beginning of the Ravensview expansion and upgrades when Utilities Kingston, J. L. Richards and Associates, and Pomerleau Ontario Inc. donated the proceeds from the sale of trees removed from the property during site preparation. Sold for lumber and firewood, the effort raised more than $1,000.

Frequent on-site barbeques, lunches, and other events proved profitable for the food bank, as did the Meeting Attendance and Awareness campaign, which brought new meaning to a fine idea.

"We want to encourage respect for everyone's time at a meeting, which means showing up on schedule, and reducing interruptions," explained Mr. Lucas. "We charge $1 per minute as a late fee, and $10 if a cell phone rings in a meeting. We look at this as incentive to increase efficiency at meetings."

Mr. Lucas reports this initiative has garnered widespread support; everyone from operators to the president of Utilities Kingston has generously contributed to the cause.

"We were really delighted and surprised to be included in the Ravensview project," said Sandy Singers, executive director of Partners in Mission Food Bank. "They made us their charity of choice for the three year duration by creating an unexpected opportunity at the construction site."

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The Kingston Whig-Standard

Councillors self-serving in blocking electoral review; Letters to the editor;

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Column: Letters to the Editor

I have followed the debate in the Whig-Standard about Kingston's system for electing councillors. The question before council was whether the public should be consulted on a new approach to electing councillors that might improve accountability and interest in local government at election time. That Kingston's current councillors, each of whom has a direct pecuniary interest in the question, should feel entitled to decide that the public need not be bothered with this question is troubling.

There is ample evidence that improved governance and accountability are needed in Kingston. The perennial miserable voter turnout, anemic civic economic development and ideological factionalism on council would persuade many objective observers that fundamental political changes are needed. Additionally, since at least 1998, councillors and people close to civic governance have known that Kingston measures up very poorly on providing value for money to its residents. From the KPMG benchmark study in 1998 to the Maclean's survey published this month, Kingston has been shown to spend more on civic governance and get less for it than most comparable cities in Canada.

I believe there is a reason why Kingston has not been able to get its civic act together in spite of these clear indications of poor civic performance. Stated simply, there has only rarely been a council willing to expose these issues, subject them to systematic public review and then take corrective action.

As has just been demonstrated by this council's self serving decision to not allow a public review of the electoral system, it is not in the interests of councillors whose electoral base is a few hundred neighbours or political allies to explore known systemic issues, such as:

* poor city governance, including demonstrated poor value for money;

* poor results in achieving improved social equity in a city afflicted with a high concentration of multi-generational poverty (lots of noble talk but few results);

* only token environmental progress, such as action on plastic bags and car idling, with little progress on real urban sustain-ability, despite oft-repeated statements of good intentions (earlier councils' massive commitment to the Ravensview sewerage facility is a major exception to this observation);

* poor-to-nonexistent efforts to encourage a mix of job opportunities that will employ the full range of people in the labour market here (in fact, this and the previous council both took measures to discourage jobs for low-and middle-income workers);

* small business desperation in the face of an obsturate permits system that discourages small-scale economic development;

* inter-departmental confusion relative to city industrial and commercial lands (the perennial fruitless debate about the Kingston Economic Development Corporation being just one symptom of this problem);

* visionless civic councils here are nearly endemic -- political decision-making in Kingston is based on situational compromises without detectable coherence (except for the council during Harvey Rosen's first term as mayor, which was a startling, though not unanimously welcomed, exception).

Like many Kingstonians, I have worked in the public service for most of my life. All of us who have seen the inside of what academics call the "executive arm" of government know only too well the frustration of working in a system where the "legislative arm" (in Kingston's case, city council) lacks coherence and consistency. When political leadership is incoherent, it is not in the interest of public servants to take personal responsibility or initiative. On the other hand, where there is clear public policy and strong political leadership, the public service generally responds with enthusiasm and motivated behaviour.

Kingston has many high-quality civic managers and city staff. I know from close personal experience that this is a professional and dedicated group. But their real talents and latent abilities will come to the forefront only when there is a better and more coherent system of politics in Kingston.

The many letters to the editor on the electoral system recently published in the Whig have raised some good points. Clearly, there are those who believe the district system of electing councillors improves local representation, and they have presented some good points to consider about the importance of local access to councillors. Others -- a group among which I count myself -- believe fundamental change is essential in the way we elect councillors, and good points have been raised to support those views.

Sadly, some letters that have appeared in the Whig project a narrow, closed view that depends on hyperbole, attacks on individuals and unsupported
hypothetical assumptions to argue their points. These letters closely resemble arguments raised by some of our councillors in their successful efforts to prevent a full public discussion on this matter.

This cloistered, self-serving decision should not stand. A group of councillors who pride themselves on their open, democratic characteristics should not be allowed the hypocrisy of sweeping the issue under the rug, away from public scrutiny.

A thorough, independent public review of alternative electoral systems that might improve Kingston's governance and civic performance should be a high public priority. This matters for residents' aspirations for Kingston, their services, their taxes and their future.

Isabel Turner, a colourful and dedicated former reeve and mayor in what is now Kingston, once said that “the silent majority in this town is not easily roused, but once roused, it will carry the day every time.” I think Turner may agree with me when I say that this is an occasion when those of us who don't usually get involved should take an interest in having a full independent review of Kingston's electoral system. You have a chance this November to make it happen.

Each of us should ensure that we vote in the upcoming municipal election. That, in itself, would be a revolution of sorts. And we should vote for a candidate for council who strongly endorses a full independent review of our electoral system and is committed to improving city-wide government performance.

It's your city. Make it work for you.

Gardner Church Kingston

Gardner Church is a retired Ontario deputy minister. He chaired Kingston's amalgamation negotiations, was the chief administrator for the transition board that implemented that agreement and was the first chief administrative officer of the amalgamated city.

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World Class Water Treatment Facility Unveiled at Ravensview

Updated 1 month ago

An impressive crowd of city workers, curious citizens, and dignitaries from all levels of government came out last Friday to the opening of the upgraded Ravensview Water Pollution Control Plant. The upgrades are intended to increase the plant’s capacity by approximately 30 per cent, to accommodate for Kingston’s expected growth over the next 25 years. Ravensview’s treatment performance was also improved through the addition of a secondary treatment system. The project was completed by Pomerleau Ontario under the management of Utilities Kingston – six months ahead of schedule, and almost $14 million under-budget.

Ravensview was originally constructed in 1957, and received smaller renovations in the mid ’70s and early ’90s. Over the past six years, seven main areas of the plant had to be constructed or re-constructed, all while it maintained daily operations. The current improvements make the plant one of the three most innovative water treatment facilities in all of Canada.

“Kingston has the long term goal of becoming the most sustainable city in the country, and Ravensview will be responsible for moving forward in that regard,” said Mayor Harvy Rosen.

The facility has garnered worldwide interest from countries such as France, South Korea, and Germany, and has been toured by academics from as far away as South Africa, Cameroon, and China.

Closer to home, the upgraded plant has also been well received by its community in Kingston East.

“[The only real complaints we’ve had are about the light pollution],” said Utilities Kingston worker Stephen King. “We make sure to keep the lights as dim as possible at night.”

Project Manager Allen Lucas also recognized the importance of community co-operation:

“The project wouldn’t have been possible if not for the partnership we have with our local neighbours,” he said. “If they hadn’t understood the importance of what we were trying to do, we wouldn’t have even been able to start this project. We were able to communicate the ongoing works and receive comments [through our construction liaison committee].”

Senator Hugh Segal spoke of the remarkable co-operation between the many different governments that worked together to make Ravensview’s upgrades possible.

“We don’t do enough to pay tribute to those who made tough decisions in the past so we would have solid results in the present, so our kids can have a better future,” he said, making special reference to former mayor Isabel Turner, who set the wheels in motion for the project in 2003.

Minister of Environment and Kingston and the Islands MPP John Gerretsen spoke of the history of the plant, and of how far we’ve come in the past 50 years in terms of water treatment technology:

“In 1950 the idea of building this plant originated…to make sure waste waters that we all in one way or another contribute to would be treated so people who live down river from here would not be saddled with the burdens of improper treatment. Here we are 52 years after the original plant was operational honouring the accomplishment of implementing the complete treatment [imagined] way back in 1950.”

Utilities Kingston President and CEO Jim Keech acknowledged the remarkable accomplishments of his team, and pledged to continue the excellent productivity in the day-to-day operations of the plant.

“You can build a plant, and that’s great, but if you can’t operate it properly, it’s all a waste. Now the challenge is for us to operate it. That’s what we’re all about at Utilities Kingston and it’s our commitment to continue on with the operations.”

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Agreement Steering Committee

Canada – City of Kingston Ravensview Water Pollution Control Plant Project
Under the Canada Strategic Infrastructure Fund (CSIF)

Agenda Meeting #12
August 14, 2009 – 11:00 a.m.
Ravensview Wastewater Treatment Facility - Main Boardroom
947 Highway #2, Kingston, Ontario

1. Opening Remarks
2. Appointment of New Members to the ASC
3. Approval of Minutes (Meeting #11- October 24, 2008)
4. Approval of Agenda
5. Finances/Audit/Claims
6. Communications Protocol/Signage
7. Project Update by Kingston
8. Environmental Protection Plan Update
9. Review of Schedule A
10. Timelines for Annual Report, Audit Report
11. Other Items
12. Next Meeting

The Meeting will be followed by a tour of the Ravensview Wastewater Treatment Facility
Committee Members Present
Diana Lakoseljac, Assistant Manager for Infrastructure Operations, Industry Canada (Federal Co-Chair)
Jim Keech, President and C.E.O., Utilities Kingston (City Co-Chair)
Ben Laserson, Analyst, Infrastructure Canada (Federal Member) – VIA PHONE
Gerard Hunt, Chief Administrative Office, City of Kingston (City Member)

Others Present
Laura Meer, Communications, Industry Canada – VIA PHONE
Allen Lucas, Utilities Engineer, Utilities Kingston (Technical Project Manager)
Lana Foulds, Financial Planning Coordinator, City of Kingston

Regrets
Leanne Battaglia, Regional Operations, Industry Canada

Recorder
C. Belanger, Assistant to the President and CEO, Utilities Kingston

1. Opening Remarks
The Meeting was chaired by J. Keech, President and CEO, Utilities Kingston. There was an introduction of members as there have been various changes since the last meeting. J. Keech advised G. Hunt would be joining us later into the meeting.

2. Appointment of New Members
B. Laserson advised a letter has been drafted to formally appoint Diana Lakoseljac and himself as new members of the Agreement Steering Committee, and will be sent out by mail.

A. Lucas outlined the makeup of the committee members from the municipal side and further advised there have been no changes since the inception of the original steering committee. It was also advised Lana Foulds will be involved as an additional resource to assist with the financial matters.
3. **Approval of Minutes (Meeting #11 – October 24, 2008)**

The minutes from meeting #11 were approved as presented.

D. Lakoseljac brought up 2 outstanding items from the minutes of the last meeting:

1. Schedule A – which will be further discussed under Agenda Item #9 – Review of Schedule A
2. Ribbon Cutting Event – which will be added for discussion under Agenda Item #11 – Other Items

**G. Hunt and L. Foulds joined the meeting at 11:17 am.**

4. **Approval of Agenda**

The agenda was approved as presented.

5. **Finances/Audit/Claims**

The group had a follow up discussion on Schedule A arising out of the minutes of Meeting #11. It was questioned whether there would be a need for Ministerial Approval and Scope Changes, which was addressed through Paul Bennett’s notes previously.

The group confirmed that Project Component #4 was a re-allocation to Project Component #1. A. Lucas provided an explanation on the re-allocation and advised the component was left with minimal funds to prevent the requirement for Ministerial Approval as there were provisions made for future construction of this feature. At the last meeting of the Agreement Steering Committee, it was agreed no approvals were required other than at the committee level. An email sent out to committee members on October 29, 2008 from Paul Bennett confirmed that the minister signature was not required and it was acceptable to move forward.

Claim #11 will be submitted next week in the amount of $1,929,283 which is not the final claim. Substantial completion is based on a date of March 27, 2009. Claim #12 will represent the final claim submitted by the municipality. A total of $22.5M has been received and with the final holdback release, we will reach our $25M funding grant.

It was noted Project Component #9 – Audit, Communication, and Evaluation needs to be fulfilled and has not been claimed to the maximum amount.

A. Lucas distributed a handout which represents actual expenditures to the end of June 2009 showing $97M in total for the project.
ACTION – A. Lucas will email the document to B. Laserson, L. Meer and L. Battaglia.

It was also noted today’s scheduled tour of the facility is a component of the project close-out procedure.

6. Communications Protocol/Signage

A. Lucas distributed an insert being included with the local paper this coming weekend which was compiled and written by an independent journalist. Additionally, he also referenced Municipal World Magazine which profiled the Ravensview Wastewater Treatment Facility Upgrades in a recent publication.

The group was advised that all media references in the Annual Report are included up to March 31, 2009. Additionally, no formal press releases have been issued.

The signage/plaque was finalized and has been fabricated and installed. The project signboard located at the entranceway of the plant will remain until after the official ceremony.

7. Environmental Protection Plan (EPP) Update

A. Lucas informed the committee the project is now complete with a few minor outstanding items:

- Landscaping
- Final topsoil and seeding
- Top lift of asphalt

It is anticipated the plant will be 100% complete by mid-September. All facilities are up and running and a few deficiencies are currently being met for occupancy permits. Some trees cannot get planted until other timelines are met for landscaping and may have to wait until Spring. In terms of costs, all costs have been incurred.

B. Laserson questioned whether the Progress Report in March is the last one, or will there be a final to which A. Lucas responded there will be a June Progress Report. It was noted progress reports fall out of Senior Management Meetings of which there are no more taking place.

In response to a request from D. Lakoseljac for a quick snapshot of the entire project, A. Lucas provided a very brief overview of the project over the past 3 years.
8. **Environmental Protection Plan (EPP) Update**

A. Lucas advised inspections are ongoing. In terms of landscaping, some of the areas affected by the construction are now getting reinstated. It was also noted an estimated 10,000 trees and shrubs have been planted on the property.

9. **Review of Schedule A**

A discussion regarding Schedule A was addressed in Agenda Item 5 – Finances/Audit/Claims. There were no other concerns with Schedule A.

10. **Timelines for Annual Report, Audit Report**

B. Laserson confirmed the municipality has received the Closure Guide.

**Annual Report**

A. Lucas provided a brief outline of the Annual Report and noted there were a few changes/updates to the document which will be sent out to the group for final approval. A. Lucas also listed items that were included as ineligible, in response to a question posed by D. Lakoseljac.

**ACTION:** C Belanger will re-circulate an updated Draft for review, following which; we will take it to City Council for final receipt in September.

**Audit Report**

B. Laserson advised the financial audit is suffice however the compliance audit, which is an attestation by the Committee that the project has been completed according to the funding agreement, remains outstanding. It was suggested that it may be suffice to do one final compliance audit (non-financial audit) which speaks to the processes. There was an understanding at the beginning of this project with B. Booth and L. Cistera that this component was covered under the monthly progress reports.

**ACTION:** D. Lakoseljac requested that B. Laserson check to see if it is mandatory that a final compliance audit is required, since we are already at completion. J. Keech noted that if it is a requirement, we may require some assistance in preparing the document.

11. **Other Items**

   **Ribbon Cutting Event**

   J. Keech advised the group that August 28 was the proposed date for the Ribbon Cutting Event, however we are still awaiting confirmation at the federal level on attendance. L. Meer explained that the CSIF falls under Minister Baird’s office and
therefore the invitation cannot be extended without a formal decline. J. Keech relayed a conversation with Peter Milliken a week ago about the event and it was suggested that he (Peter Milliken) could contact Minister Baird’s Office directly. L. Meer suggested holding off and there would be one final attempt made with the message that there is a sense of urgency to get confirmation by the end of the day. It was agreed if there was no final confirmation by the end of the day, the event would be cancelled.

In the event the event is cancelled, the best way to go about planning the event is through the Minister’s Office for the coordination of an agreeable date between the federal and provincial groups. The municipality would lead on organizing the logistics of the event, while the federal level would lead on coordinating the releases and media advisory.

Congratulations
G. Hunt extended congratulations to J. Keech and A. Lucas on the successful completion of the project and to the federal and provincial representatives and colleagues for the efforts put into this project.

Both D. Lakoseljac and B. Laserson also extended their congratulations and for keeping detailed records and maintaining communication.

12. Next Meeting

It was agreed this was the last formal meeting of the Agreement Steering Committee, and in doing so, the committee is formally disbanded once the final closure duties are completed.

Both D. Lakoseljac and B. Laserson are unable to attend the upcoming closing event.

Meeting adjourned at 12:25 p.m.
CSIF 2007-08 Annual Report
Appendix D

Project Photos
Biological Aerated Filter Construction
Construction of Pumping Station
(located in SE corner of BAF)
Construction of One Additional Digester
Grit Removal Improvements
Grit Removal Improvements (cont’d)
Primary Clarifiers