

MINUTES
PUBLIC UTILITIES COMMISSION

**CHATHAM-KENT PUC
BOARDROOM**

**SEPTEMBER 29, 2011
3:00 PM**

PRESENT: Chairman Jeff Wesley, Commissioners Bryon Fluker, Frank Vercouteren, Bob Myers, Mayor Randy Hope, General Manager Tom Kissner, Facility and Systems Manager Rob Bernardi, Manager (North) Robin Dudley, Manager (Central) Tim Sunderland and Manager (South) Darren Galbraith.

ABSENT: Commissioners Leon Leclair, Steve Pinsonneault and A/CAO Ray Payne.

1. CALL TO ORDER

Chairman Jeff Wesley called the meeting to order at 3:00 PM.

2. DECLARATION OF PECUNIARY INTEREST

NONE

3. APPROVAL OF MINUTES

- a) June 27, 2011
- b) September 19, 2011

Moved by Commissioner Vercouteren and seconded by Commissioner Myers.

“That the minutes of June 27, 2011 Regular Meeting and September 19, 2011 Special Meeting be approved.”

Motion carried

Moved by Commissioner Vercouteren and seconded by Commissioner Myers to move Report 5 b) to be the next item on the agenda.

Motion carried

5. REPORTS

- b) McNaughton Line Waterline Extension

MUNICIPALITY OF CHATHAM-KENT
Public Utilities Commission

TO: PUC Chairperson and Commissioners

FROM: Jeannie Medeiros
Technical Assistant/Projects Co-ordinator, Chatham-Kent PUC

DATE: August 3, 2011

SUBJECT: McNaughton Line Waterline Extension
(Community of Chatham Township)

RECOMMENDATIONS

It is recommended that:

1. The proposed McNaughton Line waterline be approved to proceed.
2. Administration prepares a report to Chatham-Kent Council for the approval of the project and authorization for the necessary By-law under Part XII of the Municipal Act, 2001.
3. The property owners in this area are informed by letter of the vote results and the PUC action.

BACKGROUND

A McNaughton Line petition was submitted to the Chatham-Kent Public Utilities Commission in July 2010.

The initial vote in March 2011 did not have the support to continue. Eighty-one percent (81%) of the property owners returned the ballots. The ballot results were sixty-three percent (63%) of proceeding with the project.

In June 2011 a new petition was submitted to the PUC.

COMMENTS

The system will be connected to the existing 150 mm diameter main at 9448 McNaughton Line, and head easterly to Municipal #9623 McNaughton Line, for a distance of approximately 825 m.

A total of eleven (11) occupied residential properties and one (1) vacant agricultural properties exist within the proposed water distribution area.

The estimated cost for the project was \$126,564.00. The estimated cost per connection including the 2011 Part 12 Charge was \$15,578.00.

An information and vote package describing the proposed extension project and costs associated, was distributed on June 30. A ballot was included with the return date of July 21.

Eighty-one percent (81%) of the property owners returned the ballots. The ballot results were sixty-seven percent (67%) of proceeding with the project.

The PUC received two "No" votes on July 25th, 4 days past the ballot due date. If the 2 "No" votes were valid, the percentage in favour of the project would have been 59%.

It was indicated to the property owners that the PUC would require that a majority were in favour of the project and, that as a guideline, 66% of the returned votes should support the project before administration would recommend that the project proceed to construction.

An affected property owner contacted the PUC and indicated they are willing to proceed with the project, on the basis of a local improvement, where they would pay 100% of the project cost.

COMMUNITY STRATEGIC PLAN

The recommendations in this report support the following objectives and strategic directions:

B. Economy-We are a prosperous community

B3: Maintain and enhance new and existing infrastructure to support economic and smart growth opportunities

Desired Outcomes / Proposed Activities

- Advocate for essential provincial and federal investment and equitable tax policies to support financing and effective operation of sustainable transportation systems, water, sewer and waste management services.
- Support new infrastructure investments and modernize existing infrastructure.
- Maintain and improve the quantity and quality of ground and surface waters

The recommendations will not adversely impact the remainder of the Community Strategic Plan.

CONSULTATION

Engineering and Transportation Division carried out the project costing.

FINANCIAL IMPLICATIONS

All costs associated with the project will be recovered through assessment.

Prepared by:

Reviewed by:

Jeannie Medeiros
Technical Assistant/Projects Coordinator

Tom Kissner
General Manager
Chatham-Kent PUC

Moved by Commissioner Myers and seconded by Commissioner Fluker.

“That the proposed McNaughton Line waterline be approved to proceed.

Administration prepares a report to Chatham-Kent Council for the approval of the project and authorization for the necessary By-law under Part XII of the Municipal Act, 2001.

The property owners in this area are informed by letter of the vote results and the PUC action.”

Motion carried

4. PRESENTATION

a) Water & Wastewater Rate Study

Gary Scandlan, CN Watson & Assoc., presented an overview of Chatham-Kent Public Utilities Commission Water and Wastewater Rate Study.

Moved by Commissioner Vercouteren and seconded by Commissioner Fluker.

“To accept the presentation.”

Motion carried

Moved by Mayor Hope and seconded by Commissioner Fluker to move Report 5 f) to be the next item on the agenda.

Motion carried

5. REPORTS

f) Water & Wastewater Rate Study – 2011

MUNICIPALITY OF CHATHAM-KENT
Public Utilities Commission

TO: PUC Chairperson and Commission Members
FROM: Tom Kissner
General Manager
Chatham-Kent Public Utilities Commission
DATE: September 25, 2011
SUBJECT: Water and Wastewater Rate Study – June 16, 2011

RECOMMENDATION

It is recommended that:

1. Commission approve the Capital Plan and the associated Capital Financing Plan for water and wastewater as provided in the Water and Wastewater Study.
2. Commission approve the adoption of lifecycle costs for the replacement of water and wastewater infrastructure, subject to the requirements of O.Reg. 453/07.
3. Commission provide for the recovery of all water and wastewater costs through full cost recovery rates.
4. Commission support the 2012 rates that have been calculated for water and wastewater systems as provided in the Water and Wastewater Study.

BACKGROUND

Since 2001, Watson and Associates Economists Ltd. has assisted Chatham-Kent Public Utilities Commission (CK PUC) in developing long range financial plans and associated rates for water and wastewater services. The long range financial plans have addressed future capital works associated with master plan recommendations as well as lifecycle replacement of aging assets.

The study that was completed in 2001 was commissioned to address water and wastewater rates over a five year period to recover operating costs and net capital expenditures.

An administrative review and update of the study took place in 2006 but a number of changes in the past few years, such as reduction in anticipated growth rates, reduction in consumption, etc., necessitated the need for a full review and update of the 2001 Water and Wastewater rate study. In March 2010, Commission authorized administration to retain Watson and Associates Economists Ltd. to review and update the 2001 study.

Currently, a water and wastewater master plan is being completed for Chatham-Kent PUC. Upon completion of the master plan, the Water and Wastewater Rate Study will require some minimal updating in order that it is current with the information contained in the master plan. The master plan is anticipated to be completed in the first quarter of 2012.

COMMENTS

The objectives of the Water and Wastewater Rate Study are:

- Identification of all current and future water and wastewater system capital needs to assess the immediate and longer-term implications
- Identification of potential methods of cost recovery from the capital needs listing. These recovery methods may include other statutory authorities (e.g. Development Charges, Municipal Act, etc.) as an offset to recovery through the water and wastewater rates;
- Identification of existing operational costs by component and an estimation of future operating costs over the next ten (10) years. The assessment identifies fixed and variable costs in order to project those costs that are sensitive to changes to existing infrastructure inventory, as well as costs which may increase subsequent to growth;

The Study is comprised of the following sections:

1. Introduction

The Introduction contains background information with regards to the facilities and systems owned and operated by CK PUC. The study process as well as pertinent water and wastewater legislation is also addressed in this section. Servicing requirements due to growth are also referenced.

2. Capital Infrastructure Needs

Capital forecasts by year are provided for each water and wastewater system in this section. Some of these capital works are new infrastructure while other capital works are attributed to expansions, upgrades and/or rehabilitation.

3. Life Cycle Costing

Life cycle costs are all the costs which are incurred during the life cycle of a physical asset, from the time its acquisition is first considered, to the time it is taken out of service for disposal or redeployment. This section of the study deals with the financing costs of assets, costing methods and the impacts to the CK PUC budgets.

4. Capital Cost Financing Options

The methods of capital cost recovery available to municipalities are outlined in section 4. A capital budget forecast has been developed as well as a recommended approach for recovery of capital costs.

5. Overview of Expenditures and Revenues

In the study, expenditures were based on 2011 figures with future expenditures calculated with forecast inflationary adjustments. Revenues were based on growth in the case of base charges as well as volume charges.

6. Pricing Structures

Alternative pricing structures are reviewed, assessed and compared to other rate structures that exist in Ontario. As well, a recommended rate structure is discussed in this section.

7. Analysis of Water and Wastewater Rates and Policy Matters

This section of the study provides for the calculation of water and wastewater rates over the next ten (10) year period.

8. Recommendations

The recommendations contained in this report are reflective of the recommendations contained in this section of the study.

Water and Wastewater Rate Study Highlights

The following tables contain capital infrastructure forecasts by year for water and wastewater systems:

| Water Capital Budget (inflated) | | |
|-----------------------------------------------------|-----------|--------------|
| Description | Timing | Total |
| Capital Expenditures | | |
| Water meter upgrades | 2011-2020 | \$2,641,000 |
| South Chatham-Kent WTP expansion | 2020 | \$4,780,000 |
| Blenheim pumping station (pumps and reservoir) | 2012 | \$2,164,000 |
| Kent Bridge Road watermain installation | 2012 | \$1,082,000 |
| Chatham raw waterline rehabilitation | 2013 | \$1,248,000 |
| South Chatham-Kent WTP watermain | 2013 | \$1,040,000 |
| Chatham raw waterline rehabilitation | 2014 | \$637,000 |
| South Chatham-Kent WTP membrane module replacement | 2014 | \$1,061,000 |
| Tower repainting – Chatham, Cedar Springs, Blenheim | 2014 | \$2,122,000 |
| Chatham WTP – filter to waste capabilities | 2015 | \$541,000 |
| Chatham raw waterline rehabilitation | 2015 | \$649,000 |
| Ridgetown/Highgate water supply | 2015 | \$5,953,000 |
| Chatham WTP – watermain to Grand Ave. | 2016 | \$552,000 |
| Chatham raw waterline rehabilitation | 2016 | \$662,000 |
| Chatham – Thames River crossing | 2017 | \$2,451,000 |
| Chatham – storage capacity | 2018 | \$5,743,000 |
| Chatham WTP – scrubber system – chlorine room | 2019 | \$586,000 |
| Ridgetown – Hwy 21 from Ridgetown to Thamesville | 2019 | \$4,370,000 |
| Chatham – Indian Creek Rd. To Hwy 40/401 | 2020 | \$2,019,000 |
| Chatham – Maple Leaf Dr. And Indian Creek Rd | 2020 | \$2,972,000 |
| Studies | | |
| Water/Wastewater Rate Study | 2011 | \$20,000 |
| Master Plan | 2011 | \$150,000 |
| Total Capital Expenditures | | \$43,443,000 |

| Wastewater Capital Budget (inflated) | | |
|------------------------------------------------------|-----------|-------------|
| Description | Timing | Total |
| Capital Expenditures | | |
| Chatham pump station upgrades | 2011-2020 | \$2,082,000 |
| Wallaceburg pump station upgrades | 2011-2020 | \$1,892,000 |
| Wallaceburg sludge upgrades | 2012-2020 | \$646,000 |
| Wallaceburg replacement of Queen St. Pump station | 2013 | \$1,040,000 |
| Wallaceburg WPCP – standby power and UV replacement | 2013 | \$649,000 |
| Wallaceburg WPCP – replacement of SCADA | 2013 | \$208,000 |
| Chatham WPCP – regionalization of biosolids handling | 2014 | \$1,857,000 |
| Dresden WPCP – plant upgrades | 2015 | \$552,000 |
| Thamesville WPCP – plant upgrades | 2015 | \$2,365,000 |
| Wheatley WPCP – plant upgrades | 2015 | \$3,158,000 |
| Blenheim wastewater system – new UV system | 2016 | \$225,000 |

| | | |
|---------------------------------------------------------|------|--------------|
| Chatham WPCP – new UV system | 2016 | \$1,126,000 |
| Dresden WPCP – solids handling improvement system | 2016 | \$230,000 |
| Erie Beach and Eriean – new collection and treat system | 2020 | \$8,075,000 |
| Studies | | |
| Water/Wastewater Rate Study | 2011 | \$20,000 |
| Master Plan | 2011 | \$150,000 |
| Total Capital Expenditures | | \$24,275,000 |

The following table is a summary of the current Water and Wastewater infrastructure:

| Area | Total Replacement Value | Amount to be funded in 10 year forecast | Net Replacement for Future Lifecycle | Annual Lifecycle Replacement |
|-----------------------|-------------------------|-----------------------------------------|--------------------------------------|------------------------------|
| Water Facilities | \$136,828,414 | \$22,832,736 | \$113,995,678 | \$3,775,641 |
| Vehicles | \$1,000,052 | \$946,220 | \$53,832 | \$4,459 |
| Linear | \$370,009,498 | \$49,457,366 | \$320,552,132 | \$9,257,588 |
| Total Water | \$507,837,964 | \$73,236,322 | \$434,601,642 | \$13,037,687 |
| Wastewater Facilities | \$170,898,548 | \$71,251,515 | \$99,647,033 | \$3,527,753 |
| Vehicles | \$1,280,746 | \$1,132,268 | \$148,478 | \$12,949 |
| Sewers | \$241,034,903 | \$718,834 | \$240,316,069 | \$5,890,434 |
| Total Wastewater | \$413,214,197 | \$73,102,617 | \$340,111,580 | \$9,431,135 |
| Total | \$921,052,161 | \$146,338,939 | \$774,713,222 | \$22,468,822 |

The following tables contain the recommended future rates for water and wastewater:

| Water Rate Summary | | | | | | | | | | | |
|-------------------------------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Description | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Block 1 | 0.84 | 0.88 | 0.93 | 0.98 | 1.04 | 1.10 | 1.16 | 1.23 | 1.30 | 1.38 | 1.46 |
| Block 2 | 0.39 | 0.40 | 0.51 | 0.54 | 0.57 | 0.60 | 0.63 | 0.67 | 0.71 | 0.75 | 0.79 |
| Calculation of average residential customer water bill based on 200 cubic metres of usage | | | | | | | | | | | |
| Monthly base rate | 12.50 | 14.00 | 14.50 | 15.00 | 15.50 | 16.00 | 16.50 | 17.00 | 17.50 | 18.00 | 18.50 |
| Block 1 rate | 0.84 | 0.88 | 0.93 | 0.98 | 1.04 | 1.10 | 1.16 | 1.23 | 1.30 | 1.38 | 1.46 |
| Annual base rate | 150.00 | 168.00 | 174.00 | 180.00 | 186.00 | 192.00 | 198.00 | 204.00 | 210.00 | 216.00 | 222.00 |
| Annual consumption rate | 168.00 | 176.00 | 186.12 | 196.82 | 208.14 | 220.11 | 232.76 | 246.15 | 260.30 | 275.27 | 291.10 |
| Total Annual Bill | 318.00 | 344.00 | 360.12 | 376.82 | 394.14 | 412.11 | 430.76 | 450.15 | 470.30 | 491.27 | 513.10 |
| % increase | | 8.2 | 4.7 | 4.6 | 4.6 | 4.6 | 4.5 | 4.5 | 4.5 | 4.5 | 4.4 |

| Wastewater Rate Summary | | | | | | | | | | | |
|-------------------------------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Description | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Block 1 | 0.69 | 0.75 | 0.79 | 0.83 | 0.87 | 0.91 | 0.96 | 1.01 | 1.06 | 1.11 | 1.16 |
| Block 2 | 0.34 | 0.35 | 0.42 | 0.44 | 0.46 | 0.49 | 0.51 | 0.54 | 0.56 | 0.59 | 0.62 |
| Calculation of average residential customer water bill based on 200 cubic metres of usage | | | | | | | | | | | |
| Monthly base rate | 15.50 | 17.00 | 17.50 | 18.00 | 18.50 | 19.00 | 19.50 | 20.00 | 20.50 | 21.00 | 21.50 |
| Block 1 rate | 0.69 | 0.75 | 0.79 | 0.83 | 0.87 | 0.91 | 0.96 | 1.01 | 1.06 | 1.11 | 1.16 |
| Annual base rate | 186.00 | 204.00 | 210.00 | 216.00 | 222.00 | 228.00 | 234.00 | 240.00 | 246.00 | 252.00 | 258.00 |
| Annual consumption rate | 138.00 | 150.00 | 157.50 | 165.38 | 173.64 | 182.33 | 191.44 | 201.01 | 211.07 | 221.62 | 232.70 |
| Total Annual Bill | 324.00 | 354.00 | 367.50 | 381.38 | 395.64 | 410.33 | 425.44 | 441.01 | 457.07 | 473.62 | 490.70 |
| % increase | | 9.3 | 3.8 | 3.8 | 3.7 | 3.7 | 3.7 | 3.7 | 3.6 | 3.6 | 3.6 |

The proposed water and wastewater rate structure allows for full cost recovery of all future new projects while remaining competitive with other major urban centres. The proposed rate structure will also enable CK PUC to move towards becoming fully sustainable by 2020.

CONSULTATIONS

Gary Scandlan, Associate Director, Watson and Associates Economists Ltd.

FINANCIAL IMPLICATIONS

The proposed water and wastewater rates will provide sufficient funding for the operations, maintenance and payment of capital project costs and debt financing costs. The lifecycle reserve funds will provide for sufficient funding for infrastructure upgrading/replacement in the future.

Prepared by:

Tom Kissner,
General Manager
Chatham-Kent PUC

Moved by Commissioner Leclair and seconded by Commissioner Vercoouteren.

“That Commission approve the Capital Plan and the associated Capital Financing Plan for water and wastewater as provided in the Water and Wastewater Study.

Commission approve the adoption of lifecycle costs for the replacement of water and wastewater infrastructure, subject to the requirements of O.Reg. 453/07.

Commission provide for the recovery of all water and wastewater costs through full cost recovery rates.

Commission support the 2012 rates that have been calculated for water and wastewater systems as provided in the Water and Wastewater Study.”

Motion carried

a) Middle Line Waterline Extension – Blenheim to Charing Cross

MUNICIPALITY OF CHATHAM-KENT

Public Utilities Commission

TO: PUC Chairperson and Commissioners
FROM: Jeannie Medeiros
Technical Assistant/Projects Coordinator, Chatham-Kent PUC
DATE: August 3, 2011
SUBJECT: Middle Line Waterline Extension – Blenheim to Charing Cross
(Community of Harwich Township)

RECOMMENDATIONS

It is recommended that:

1. The proposed Middle Line waterline extension not proceed at this time.
2. The property owners in this area are informed by letter of the vote results and the PUC action.

BACKGROUND

A Middle Line petition was submitted to the Chatham-Kent Public Utilities Commission in May 2011.

COMMENTS

The system would have been connected to the existing 200 mm main at Charing Cross, easterly on Middle Line to an existing 300 mm main west of Allison Line, a total distance of approximately 6,125 m. An area map of the proposal is on page 4.

A total of thirty (30) occupied residential properties and three (3) vacant agricultural properties or second units existed within the proposed water distribution area.
The estimated cost per connection for the proposed waterline extension, including the 2011 Part 12 Charge was \$18,323 per full connection.

The estimated cost for the project, including engineering was \$702, 860, which included \$177,860 associated with oversizing and would have been charged to the PUC.

Details of the project and the estimated cost per connection were presented to the benefiting property owners at a public meeting held on July 6 at Blenheim Memorial Arena and by mail using a ballot page and information package.

An information and vote package describing the proposed extension project and costs associated, was distributed to the benefiting property owners on July 7,2011 . A ballot was included with the return date of July 28.

Ninety-three percent (93%) of the property owners returned the ballots. The ballot results were twenty-eight percent (28%) of proceeding with the project.

Based on the approved Waterline Assessment Policy requiring 66% support, it is our recommendation that the PUC not proceed with providing water servicing to the residences along Middle Line and that the property owners are notified by letter, of the vote results and the PUC action.

COMMUNITY STRATEGIC PLAN

The recommendations in this report support the following objectives and strategic directions:

B. Economy-We are a prosperous community

B3: Maintain and enhance new and existing infrastructure to support economic and smart growth opportunities

Desired Outcomes / Proposed Activities

- Advocate for essential provincial and federal investment and equitable tax policies to support financing and effective operation of sustainable transportation systems, water, sewer and waste management services.
- Support new infrastructure investments and modernize existing infrastructure.
- Maintain and improve the quantity and quality of ground and surface waters

The recommendations will not adversely impact the remainder of the Community Strategic Plan.

CONSULTATION

Dillon Consulting Limited were consulted while preparing the preliminary engineering information.

FINANCIAL IMPLICATIONS

The estimated cost of \$177,860 associated with oversizing would have been allocated to the PUC.

All other costs associated with the project would have been recovered through assessment.

Prepared by:

Reviewed by:

Jeannie Medeiros
Technical Assistant/Projects Coordinator

Tom Kissner
General Manager
Chatham-Kent PUC

Moved by Mayor Hope and seconded by Commissioner Vercouteren.

“That the proposed Middle Line waterline extension not proceed at this time.

The property owners in this area is informed by letter of the vote results and the PUC action.”

Motion carried

c) Greenhouse Development/Expansion

MUNICIPALITY OF CHATHAM-KENT Public Utilities Commission

TO: PUC Chairperson and Commissioners

FROM: Tom Kissner
General Manager
Chatham-Kent Public Utilities Commission

DATE: September 19, 2011

SUBJECT: PUC Approval Process for Greenhouse Development/Expansion

RECOMMENDATION

It is recommended that:

1. Commission approve the use of the attached "Application for a Greenhouse Rate-of-Flow Control System" as part of the PUC approval process for greenhouse development or expansion.
2. Commission approve the use of the attached "Greenhouse Application Agreement" as part of the PUC approval process for greenhouse development or expansion.

BACKGROUND

The amount of agricultural land that has been converted to greenhouse farming in Ontario has steadily increased over the past decade. A Greenhouse Feasibility Study completed in 2000 by the Municipality, found that there was an opportunity to expand greenhouse farming in Chatham-Kent and in fact, there has been significant growth in the greenhouse industry within Chatham-Kent in the ten (10) years since.

There are many components to greenhouse farming that are not common to traditional farming operations. Greenhouse farmers advise that the one of the most important locational criteria based on current greenhouse technology includes the availability of a good supply of high quality water, which is most commonly supplied through a municipal system.

COMMENTS

Water supply requirements for hydroponic greenhouse operations vary according to the type of crop being grown, plant density, stage of development of the plants, the time of year and climatic conditions. The average estimate for water demand is 2.5 to 3.5 litres per plant per day. Planting density varies from approximately 10,000 plants per acre for cucumbers and tomatoes to approximately 16,000 plants per acre for peppers. In consideration of that information, water demand ranges from 25,000 to 56,000 litres per acre per day.

The magnitude of water use by greenhouse operations places a very significant demand on both the municipal water treatment plant as well as the water distribution system. The use of retention ponds and reservoirs allow greenhouse operations to draw water at non-peak times to help alleviate the pressure placed on the water system during peak time periods. The benefits of using these types of storage facilities is that water demand can be spread uniformly over a longer period of time, thereby reducing the peak rate of water demand and achieving economies in sizing and operations of the water treatment and delivery systems.

Early greenhouse farms were commonly three (3) to five (5) acres in area, however in 2010, the average greenhouse farm is closer to ten (10) acres in area. Many experts suggest that to open a new greenhouse operation in Southwestern Ontario, the most viable starting size is at least ten (10) acres in area.

In 2000, the Chatham-Kent greenhouse market consisted of thirty (30) acres. In the past ten (10) years, the municipal inventory has expanded to 110 acres with an average operation size of 15.6 acres. The current average operation size translates to a maximum water demand of 874,000 litres per day depending on what type of crop is planted. This demand is the equivalent of approximately 1,460 homes. A survey of the local greenhouse growers indicates that all of the current greenhouse growers have plans for expansion over the next ten (10) years. They have relayed the fact that expansion is very important for the viability of greenhouses as they must continue to grow to compete in the global market and improve profit margins. Chatham-Kent greenhouses have planned a total expansion of approximately 141 acres over the next ten (10) years. This would bring the total Chatham-Kent inventory to 250 acres by 2020, not including any new start-up operations.

Currently, approval for any greenhouse development or expansion is considered by the Municipal Technical Advisory Committee (TAC). The PUC Automated Mapping/Facility Mapping (AM/FM) staff runs water modelling scenarios to determine impact to the water treatment and distribution systems as well as to determine the rate of water supply that can be supported through the existing infrastructure. PUC approval of the development or expansion is based on the information that is produced from the water

modelling scenarios. Maximum rate of water supply from the system is provided and must be agreed to by the greenhouse grower prior to PUC approval being granted. At this point in time, the PUC relies on the greenhouse grower to regulate the draw rate from the water distribution system to the agreed rate of supply, due to the fact that the PUC does not have any requirements in place for the installation of standardized equipment that can control flow rates. It is for this reason that administration is recommending a rate-of-flow control system be a requirement as part of the approval process. In order for administration to determine greenhouse water supply requirements, it is also being recommended that an "Application for a Greenhouse Rate-of-Flow Control System" be completed and submitted prior to any PUC approvals being granted.

The purpose of the rate-of-flow control system is to control the filling rate of the on-site storage facilities so that the instantaneous rate of water withdrawal from the municipal water supply is maintained at or below the maximum approved rate. The rate-of-flow control system will consist of a mechanical flow meter, electric modulating valve, manual by-pass valve and microprocessor control unit. A backflow preventor is also required to prevent possible contamination of the municipal water supply. A typical schematic of a rate-of-flow control system is included as an attachment.

CONSULTATIONS

Michael Arthur, Chief Building Official, Town of Kingsville
 Nelson Carvalho, Water Supervisor, Town of Leamington
 Carol Holling, Paralegal, Corporate Services, Municipality of Chatham-Kent
 Mr. James Wickett, Lawyer, O'Brien Jacklin Wickett Sulman

FINANCIAL IMPLICATIONS

There are no financial impacts to the PUC associated with the approval of the recommendation contained in this report. It is estimated that the cost of a flow control system is \$15,000 which will be the responsibility of the greenhouse developer.

Prepared by:

Tom Kissner,
 General Manager
 Chatham-Kent PUC

Moved by Mayor Hope and seconded by Commissioner Myers.

"That Commission approve the use of the attached "Application for a Greenhouse Rate-of-Flow Control System" as part of the PUC approval process for greenhouse development or expansion.

Commission approve the use of the attached "Greenhouse Application Agreement" as part of the PUC approval process for greenhouse development or expansion."

Motion carried

d) Bloomfield Rd. Watermain Replacement – Tender Award

MUNICIPALITY OF CHATHAM-KENT
 INFRASTRUCTURE AND ENGINEERING SERVICES
 PUBLIC UTILITIES COMMISSION

TO: PUC Chairperson and Commissioners
 FROM: Nelson Cavacas, C.E.T. Manager,
 Infrastructure and Development Engineering
 DATE: September 9, 2011
 Subject: Tender Award: Contract T11-141, Bloomfield Road
 Water Main Replacement, Community of Chatham

RECOMMENDATIONS

It is recommended that:

1. The tender in the amount of \$563,644.00 including HST for the Bloomfield Road Water Main Replacement in the Community of Chatham be awarded to Henry Heyink Construction Limited.
2. The Bloomfield Road Water main Replacement project costs in the amount of \$537,578.88 be funded from the approved 2011 Lifecycle Water main Replacement budget.

BACKGROUND

The water main replacement on Bloomfield Road in Chatham was identified as a project in the 2011 budget approved by the Public Utilities Commission (PUC).

The existing water main is 51 years old and consists of a 300mm diameter cast iron line with a history of watermain breaks recorded within the inventory system. This water main is located along the south curb line of Bloomfield Road and traffic on this major arterial road along with a number of major businesses are disrupted each time this main has required an emergency repair. In addition, recent water main repairs this past year have occurred abutting the Canadian National (CN) Railway tracks thus further highlighting the priority to have this main replaced.

The replacement of the existing main with a 300mm poly vinyl chloride (PVC) pipe will enhance the pressure, distribution grid and support fire protection to this area.

The engineering, contract administration, and inspection on this project are being carried out by the Engineering and Transportation Division.

The Purchasing Officer received and opened tenders for the work on Thursday, September 1, 2011. The results are as follows:

| CONTRACT T11-141 BLOOMFIELD ROAD WATER MAIN REPLACEMENT COMMUNITY OF CHATHAM | | |
|------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------|
| Rank | Tenderer | Tender Amount |
| 1 | Henry Heyink Construction Limited Chatham, Ontario. | \$ 563,644.00 |
| 2 | Clarke Construction Incorporated Blenheim, Ontario. | \$ 609,130.49* |
| 3 | SLR Contracting Group Incorporated Windsor, Ontario. | \$ 665,000.00 |
| 4 | D'Amore Construction (2000) Limited Windsor, Ontario. | \$ 864,896.35 |
| 5 | Sherway Contracting (Windsor) Limited Windsor, Ontario | \$ 1,101,709.32 |

* Note: A mathematical error was corrected but it did not impact the tender outcome.

Engineering and Transportation Division has reviewed the tenders and found them to be complete in all respects except for the bid received from Clarke Construction Incorporated where an arithmetic error was corrected. This correction did not impact the tender rankings.

COMMENTS

The project consists of the installation of a new 300mm replacement water main on Bloomfield Road from Richmond Street to Park Avenue West including a steel casing for the CN Railway track crossing.

The project also includes new water service connections, fire hydrants and appurtenances. A site map of the water main replacement has been attached for reference (see Appendix A). There are no engineering costs for design, tendering, inspection and contract administration since this work is being carried out by the Engineering and Transportation Division under existing Service Level Agreements with the PUC. Therefore, only costs for geotechnical report, material testing and monitoring program to be completed by Golder Associates required by CN Railway for the jack and bore work under the railway tracks shall be completed by Golder Associates and are estimated at \$20,000. In addition, the CN Railway approval is \$10,000 for the steel casing crossing approval.

The Engineering and Transportation Division's most recent estimate for construction was \$565,000 excluding HST. Five competitive bids were received on the project. The low tender received is 12% below the construction estimate and 26% below the average of the five tenders received.

It is the recommendation herein that the contract be awarded to Henry Heyink Construction Limited who submitted the lowest tender bid.

The project breakdown is summarized in the Financial Implications section of this report.

COMMUNITY STRATEGIC PLAN

The recommendations in this report support the following objective and strategic direction:

B. Economy – We are a prosperous community

B3: Maintain and enhance new and existing infrastructure to support economic and smart growth opportunities

Desired Outcomes / Proposed Activities

- Support new infrastructure investments and modernize existing infrastructure

The recommendations will not adversely impact on the remainder of the Community Strategic Plan.

CONSULTATION

The Tenders were opened by the Purchasing Officer and reviewed by the Tendering Committee which includes the Purchasing Officer, Corporate Services, the Acting Director, Financial Services/Treasurer, Corporate Services and the Director, Engineering and Transportation Division, Infrastructure and Engineering Services.

The General Manager of Water and Wastewater Services was consulted in the preparation of this report and supports the recommendations.

FINANCIAL IMPLICATIONS

The project is being funded from the approved PUC 2011 Water Lifecycle Budget.

The project summary is set out in the following table.

| BLOOMFIELD ROAD WATERMAIN REPLACEMENT CONTRACT T11-141 COMMUNITY OF CHATHAM | | |
|-----------------------------------------------------------------------------------|---------------------------------|---------------|
| (A) | DESCRIPTION | TOTAL |
| Project Costs | Low Tender, incl. HST | \$ 563,644.00 |
| | Geotechnical & Material Testing | \$ 20,000.00 |
| | CN Railway Crossing Approvals | \$ 10,000.00 |
| | Less HST Rebate 11.24% | -\$ 56,065.12 |
| | Total | \$ 537,578.88 |
| (B) Project Funding | Watermain Lifecycle | \$ 537,578.88 |
| | Funding Totals | \$ 537,578.88 |
| (C) Watermain Replacement Budget Update Summary | Total 2011 Approved Budget | \$ 800,000.00 |
| | <i>Current Project</i> | \$ 537,578.88 |
| | Balance Remaining | \$ 262,421.12 |

The remaining water main replacement budget lifecycle in the amount of \$262,421.12 is committed to two other water replacement projects that have not been tendered to date. These two projects are Dufferin Avenue Watermain in the community of Chatham Gore and Erie Street South in the community of Ridgeway to facilitate the construction for the replacement of a municipal drain culvert near the Centennial Avenue intersection.

Prepared by:

Nelson Cavacas, C.E.T.
 Manager,
 Infrastructure and Development Engineering
 Engineering and Transportation Division

Reviewed by:

Gary Northcott, P. Eng.
 Director,
 Engineering and Transportation Division

Reviewed by:

Leo Denys, P. Eng.
 General Manager
 Infrastructure and Engineering Services

Moved by Commissioner Myers and seconded by Commissioner Vercoueren.

“That the tender in the amount of \$563,644.00 including HST for the Bloomfield Road Water Main Replacement in the Community of Chatham be awarded to Henry Heyink Construction Limited.

The Bloomfield Road Water main Replacement project costs in the amount of \$537,578.88 be funded from the approved 2011 Lifecycle Water main Replacement budget.”

Motion carried

e) Middle Line/Wheatley Rd Watermain Extension – Tender Award

MUNICIPALITY OF CHATHAM-KENT

Public Utilities Commission

TO: PUC Chairperson and Commissioners

FROM: Tom Kissner
 General Manager, Chatham-Kent PUC

DATE: September 23, 2011

SUBJECT: Tender Award: Contract No. T11-212, Middle Line/Wheatley Road Waterline Extension, Community of Tilbury East

RECOMMENDATIONS

It is recommended that:

1. The tender in the amount of \$142,672.00, including HST for the Middle Line/Wheatley Road Waterline Extension in the Community of Tilbury-East & Town of Lakeshore, Contract T11-212 be awarded to Sherway Contracting Ltd.
2. The Chairperson and General Manager be authorized to complete the necessary contracts.

BACKGROUND

In May 2010, CKPUC received a request from residents for consideration for municipal water along Wheatley Road and Middle Line.

The system would include construction of a 150 mm waterline along Middle Line and a 100 mm waterline along Wheatley Road, which included service connections to property lines.

Increased cost due to the oversizing of the main along Middle Line will be assessed to the Tilbury Golf Club Inc.

Dillon Consulting Limited prepared an estimated cost for the proposed waterline. The estimated cost for the project, including engineering but did not include HST was \$146,358.50 of which \$31,821.00 was associated with over-sizing and would have been charged to the Tilbury Golf Club.

It was indicated to the property owners that both the Town of Lakeshore and the Chatham-Kent Public Utilities Commission will have to approve the project before the project can proceed with construction.

At the regular PUC meeting on September 23, 2010, the Commission approved that the Middle Line (Cty Rd 46) / Wheatley Rd (Cty Rd 1) waterline project proceed.

COMMENTS

Dillon Consulting Limited carried out the project engineering. The Purchasing Officer received and opened tenders for the contract on Thursday September 8, 2011.

A total of nine (9) tenders were received and they are summarized in the following table:

| Middle Line (Cty Rd 46) / Wheatley Rd (Cty Rd 1) Waterline Extension Contract T11-212 | |
|--------------------------------------------------------------------------------------------------|---------------------------------------------|
| Tenderer | Quotation amount (Excluding HST) |
| Sherway Contracting Windsor, ON | \$142,672.00 |
| Delway Contractors Ltd. Chatham, ON | \$163,000.00 |
| Clarke Construction Blenheim, ON | \$183,243.24* |
| Bill Hoekstra General Contracting Sarnia, ON | \$216,452.56 |
| D'Amore Construction (2000) Ltd. Windsor, ON | \$299,808.00 |
| Henry Heyink Construction Ltd. Chatham, ON | \$255,000.00 |
| S.L.R. Contracting Group Inc. Windsor, ON | \$262,838.94 |
| Major Construction (2010) Ltd. Windsor, ON | \$272,897.00 |
| Goodreau Excavating Tilbury, ON | \$486,084.80 |

*Note: Corrected due to arithmetic error

Dillon Consulting Limited has reviewed the tenders and advised that the tenders are complete in all respects except for an arithmetic error with the tender bid received by Clarke Construction Inc. The arithmetic error did not change the remainder of the tender rankings.

The low tender, amounting to one hundred and forty-two thousand, six hundred and seventy-two dollars (\$142,672.00), excluding taxes and contingency was received by Sherway Contracting (Windsor) Ltd. The low tender received is 14% below the Engineer's estimate of \$165,918.00.

It is recommended that the Chatham-Kent PUC award Contract No. T11-212 to Sherway Contracting (Windsor) Ltd at the tender price of \$142,672.00, including HST and that the Chairperson and General Manager be authorized to complete the necessary agreements. The award of this project is subject to receipt of the appropriate agreements in place between Chatham-Kent PUC and Lakeshore.

COMMUNITY STRATEGIC PLAN

The recommendations in this report support the following objectives and strategic directions:

B. Economy-We are a prosperous community

B3: Maintain and enhance new and existing infrastructure to support economic and smart growth opportunities

Desired Outcomes / Proposed Activities

- Advocate for essential provincial and federal investment and equitable tax policies to support financing and effective operation of sustainable transportation systems, water, sewer and waste management services.
- Support new infrastructure investments and modernize existing infrastructure.
- Maintain and improve the quantity and quality of ground and surface waters

The recommendations will not adversely impact the remainder of the Community Strategic Plan.

CONSULTATION

Dillon Consulting Limited reviewed the tenders and a copy of their letter recommending the award of the tender is attached.

FINANCIAL IMPLICATIONS

The estimated cost of \$44,149.00 associated with oversizing, Fill Hydrant installation and assessment will be allocated to the Tilbury Golf Club Inc.

All other costs associated with the project will be recovered through assessment.

Prepared by:

Jeannie Medeiros
Technical Assistant/Projects Coordinator
Chatham-Kent PUC

Reviewed by:

Reviewed by:

Rob Bernardi
Manager, Facilities & Systems
Chatham-Kent PUC

Tom Kissner
General Manager
Chatham-Kent PUC

Moved by and seconded by Commissioner Myers.

“That the tender in the amount of \$142,672.00, including HST for the Middle Line/Wheatley Road Waterline Extension in the Community of Tilbury-East & Town of Lakeshore, Contract T11-212 be awarded to Sherway Contracting Ltd.

The Chairperson and General Manager be authorized to complete the necessary contracts.”

Motion carried

6. INFORMATION

a) Asbestos Survey (to comply with MOL order)

MUNICIPALITY OF CHATHAM-KENT
PUBLIC UTILITIES COMMISSION
INFORMATION REPORT

TO: PUC Chairperson and Commissioners
FROM: Rob Bernardi, P. Eng.
Facilities & Systems Manager, Chatham-Kent PUC
DATE: September 23, 2011
SUBJECT: Asbestos Management Program – Designated Substance Surveys

This report is for the information of Commission.

BACKGROUND

An Information Report was brought to Chatham-Kent Council Meeting on September 26, 2011 explaining the requirement for an Asbestos Management Program and completion of Designated Substance Surveys. The information report is attached. The Public Utilities Commission (PUC) is also part of the Ministry of Labour (MOL) orders issued to the Municipality of Chatham-Kent.

The orders are as follows:

1. The employer is to develop an asbestos management plan.
2. The employer shall prepare and submit a compliance plan by September 30, 2011.
3. The employer is to provide awareness training to all workers who may work in proximity with asbestos containing materials (by September 30, 2011).

Further to the Chronology of Events listed in the information report, the Chatham-Kent Municipal staff met with representatives of the MOL on September 21, 2011 to clarify additional questions from the municipal departments involved.

COMMENTS

All PUC staff employees have now been trained in asbestos awareness. Training for all staff was completed on September 23, 2011. This complies with Order Number 3 above.

The Municipality will be submitting a compliance plan to the MOL by September 30, 2011 to comply with Order Number 2 above.

Order Number 1 above requires the completion of building surveys and will take into next year to complete. The large cost of the entire issue is the survey of the existing buildings and structures.

The PUC has approximately 89 buildings/structures, 56 sanitary pumping stations, 12 water towers/standpipes and 340 valve chambers.

The estimated cost to conduct a survey of all these locations is estimated at \$300,000. It should be noted that the estimated cost does not include the removal of asbestos if required.

CONSULTATION

The following team of staff has been assembled and have met several times to address this issue:

- Manager, Infrastructure and Transportation
- Manager, Municipal Assets
- Manager, Occupational Safety
- Manager, Recreation Facilities
- Purchasing Officer
- Manager, Facilities – Chatham-Kent Public Utilities Commission
- Manager of Health & Safety and Purchasing - Chatham-Kent Hydro

Consultation with the MOL has occurred several times.

Consultation has also taken place with Golder Associates, Dillon Consulting Limited and AMEC Earth & Environmental who conduct building investigations/surveys of this nature.

Prepared by:

Reviewed by:

Rob Bernardi, P. Eng.
Facilities & Systems Manager
Chatham-Kent PUC

Tom Kissner
General Manager
Chatham-Kent PUC

- b) Water/wastewater Master Plan – Public Information Meeting #2
- c) Summary of Tenders Issued for ISF Projects under the Exception to Purchasing Policy

MUNICIPALITY OF CHATHAM-KENT
PUBLIC UTILITIES COMMISSION
INFORMATION REPORT

TO: PUC Chairperson and Commissioners

FROM: Rob Bernardi, P. Eng.
Facilities & Systems Manager, Chatham-Kent PUC

DATE: September 22, 2011

SUBJECT: Summary of the Tenders Awarded for the Infrastructure Stimulus Fund (ISF) under the Exemption to Purchasing Policy

This report is for the information of Commission.

BACKGROUND

The Public Utilities Commission (PUC), at the June 27, 2011 regular scheduled meeting, approved an exemption to the Municipal Purchasing Policy for the months of July and August 2011 that authorized the Chairperson and General Manager of the PUC to approve tenders.

This exemption to the policy was required to award contracts during the period when Commission did not meet so that the schedule for completing the Infrastructure Stimulus Fund (ISF) projects would not be jeopardized. The ISF deadline is now October 30, 2011 and failure to complete the contracts by that date could result in the loss of funding.

The report in June of 2011 also included a recommendation to bring an information report back to the Commission listing all the contracts that were awarded during this second exemption period. This report will satisfy this recommendation.

COMMENTS

There was only one contract that was awarded during the month of July 2011. A summary of the contract is described below.

Contract No. T11-193 – King Street Watermain Replacement - Community of Chatham

The works included the replacement of watermain along King Street West in the Community of Chatham. The age of the existing watermain is circa 1890's. A temporary watermain is to be used to supply water to the King Street area during the construction of the new watermain. The temporary watermain is required because the new watermain has to be installed in the same location as the existing.

The project is funded through the ISF#143 program which covers 2/3 funding. The PUC is responsible for the remaining 1/3 cost.

The construction began the week of August 22, 2011 with a substantial completion date of mid October 2011.

Four tenders were received by the Municipal Purchasing Officer on July 14, 2011 and are summarized in the following table:

| Tender Results Contract T11-193 / ISF143 King Street West Watermain Replacement Community of Chatham, Municipality of Chatham-Kent | | |
|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------|
| Rank | Bidder and Location | Bid (including HST) |
| 1 | Henry Heyink Construction – Chatham, Ontario | \$ 1,129,774.00 |
| 2 | Sherway Contracting (Windsor) Limited – Windsor, Ontario | \$ 1,361,047.71 |
| 3 | Clarke Construction – Blenheim, Ontario | \$ 1,416,634.73 ^A |
| 4 | J&J Lepera Infrastructures Incorporated – LaSalle, Ontario | \$ 1,638,500.00 |
| Note A: Corrected mathematical error – did not impact rank of bids received. | | |
| Note B: All bids include a \$100,000 contingency allowance. | | |

Dillon Consulting Limited reviewed the tenders and found an arithmetical error in Clarke Construction Inc.'s bid. The corrected value was \$1,416,634.73 and did not influence the outcome of the bidding process. Dillon Consulting Limited's letter of recommendation dated July 18, 2011 is attached.

The price of \$1,129,774.00 submitted by Henry Heyink Construction Ltd. was approximately 9% lower than the engineer's estimate and 19% below the average of the four tenders received.

CONSULTATION

The tenders were opened by the Purchasing Officer and reviewed by the consultant.

Dillon Consulting Limited is the consulting engineer for this contract and a copy of their letter recommending award of the contract is attached.

Prepared by:

Reviewed by:

Rob Bernardi, P. Eng.
Facilities & Systems Manager
Chatham-Kent PUC

Tom Kissner
General Manager
Chatham-Kent PUC

Moved by Mayor Hope and seconded by Commissioner Myers.

"To receive items a) to c) for information."

Motion carried

7. NEW BUSINESS

NONE

8. NEXT MEETING

The next regular PUC Commission meeting scheduled for Thursday, October 20, 2011 at 3:00 PM.

9. ADJOURNMENT

Moved by Commissioner Vercouteren and seconded by Mayor Hope.

"That the Regular meeting be adjourned at 4:40 PM and to move In-Camera."

Motion Carried