



# JOINT BOARD OF MANAGEMENT

Wednesday, July 19, 2023

9:00 AM

Kingsville Arena,  
1741 Jasperson Ave.

## AGENDA

**A. Call to Order:**

**B. Disclosures of Pecuniary Interest:**

**C. Approval of Minutes:**

Minutes of the meeting of the Union Water Supply System Joint Board of Management Meeting held Wednesday, June 21, 2023  
Pages 2 - 6

**D. Business Arising Out of the Minutes**

**E. Items for Consideration:**

1. UW/15/23 dated July 14<sup>th</sup>, 2023 re: Status Update of UWSS Operations & Maintenance Activities and Capital Works from June 16<sup>th</sup> to July 14<sup>th</sup>, 2023  
Pages 7 - 10
2. UW/16/23 dated July 11<sup>th</sup>, 2023 re: Service Level Review of UWSS Operations and Contracted Operations and Maintenance Services  
Pages 11 - 13
3. UW/17/23 dated July 13<sup>th</sup>, 2023 re: UWSS Asset Management Strategy and Asset Management Plan  
Pages 14 - 33
4. UW/18/23 dated July 11<sup>th</sup>, 2023 re: Line of Credit between UWSS Joint Board of Management and UWSS Inc  
Pages 34 - 35
5. UW/19/23 dated July 17<sup>th</sup>, 2023 re: New Reservoir and UV Facility - Alternate Project Delivery Approach  
To be provided under a separate cover

**F. New Business:**

**G. Adjournment:**

**H. Date of Next Meeting:** To be discussed.

/kmj

# JOINT BOARD OF MANAGEMENT

Wednesday, June 21, 2023  
Unico Community Centre  
37 Beech Street  
Kingsville, Ontario  
9:00 am



## MINUTES

Members Present    Mayor MacDonald (Vice-chair); Deputy Mayor Verbeke, Councillors  
Union Water        Dunn, Tiessen, Wilkinson - Leamington  
Supply System      Mayor Rogers and Councillor Jarvis-Chausse (alternate) - Kingsville  
Deputy Mayor Bondy - Essex  
Deputy Mayor Walstedt - Lakeshore

Members absent    Councillor Abraham - Leamington  
Deputy Mayor DeYong, Councillors Gaffan & Patterson - Kingsville

Also in Attendance: Rodney Bouchard, Union Water Supply System Manager  
For UWSS            Kristine Johnson, Recording Secretary

Municipal Staff    Kevin Girard, Rob Mackie - Town of Essex  
Present:            Shaun Martinho - Town of Kingsville  
Shannon Belleau - Municipality of Leamington  
Gary Punt - Municipality of Lakeshore

OCWA Staff         Dale Dillen, Ken Penney, Dave Jubenville, Robin Trepanier,  
Present:            Tim Woolner, Sandra Reaume

**Call to Order:      9:05 am**

**Disclosure of Pecuniary Interest: none**

**Adoption of Board Minutes:**

**No. UW-26-23**

Moved by:            Councillor Dunn

Seconded by:        Councillor Tiessen

That the minutes of the Union Water Supply System Joint Board of Management meeting held on May 17, 2023 is received.

Carried

**Business Arising out of Minutes:**

There was none.

Mayor Bondy asked for a moment to thank the UWSS Manager and OCWA staff for the tour she received last month. She was grateful to tour the Ruthven Water Treatment Plant.

**Report UW/13/23 dated June 16, 2023, re: Status Update of UWSS Operations & Maintenance Activities and Capital Works from May 12<sup>th</sup> to June 16<sup>th</sup>, 2023**

The Manager reviews his report with the board. He notes that two (2) backflow devices failed and have been repaired. Kent Compressor had been on site for annual service work to compressors 1, 2 and 3 and in addition Ken Compressor provided a quote to install the recently purchased Kaiser compressor that is replacing the old one. This work should be completed in July 2023.

OCWA electrical staff installed new capacitors on High Lift pumps 8 & 9. This will improve the power factor correction and should reduce electrical costs. In addition to this work the staff completed the installation of the Variable Frequency Drives (VFDs) for the Cottam Booster Station (CBS) pumps. DTM Consulting was also retained to conduct vibration testing on CBS pump #4. The Manager notes that pump #4 is a big pump and not used frequently, but with higher flows it has been put into use.

The Manager explains that on May 25<sup>th</sup> the AWT PLC failed and was replaced with back up UPS. The Low Lift generator faulted on May 29<sup>th</sup> during monthly testing, caused by overheating. The mobile generator was moved to the location. Repairs were made on the Low Lift generator. The Manager notes that proposals for quotes to replace the back up generator are being prepared. The VFD for clarifier #4 centre mixer failed, which resulted in a shut down. Phasor attended and repairs were completed.

The new media for DAF #1 has been received and his hope is that this media is more resilient than its predecessor. He notes that Napier-Reid will be on site the week of June 26<sup>th</sup> for installation.

The Manager explains that four (4) new progressive cavity pumps for the powered activated carbon (PAC) injection system have been purchased and installed, however, these have failed. The staff is working with the supplier to determine the issue. The old pumps have been reinstalled for the time being.

The Manager notes that the interconnects between UWSS and Harrow-Colchester have been reopened for a short period of time, while repairs are made.

The Manager notes that vibration analysis on High Lift pump #6 was conducted and the it has been determined that the bearing needs replacing. This work is expected to be completed in July.

Minutes of the Special Meeting of Union Water Supply System Joint Board of Management

Date: June 21<sup>st</sup>, 2023

Page 3

The Manager provides updates on several projects. He notes that work is continuing on the AWT capacity project and field testing should be commencing shortly. This will include filling the tower higher and working with Leamington staff to determine how the system reacts. The emergency redundancy project is also making forward progress and a meeting is schedule in early July to review the Technical Memos. The board will be provided an update after the review of the Technical Memos. Finally, the new reservoir conceptual and indicative design is also progressing nicely. The Manager notes that a recommendation report should be provided to the board at the July 19<sup>th</sup> meeting.

The Manager also notes that a Notice of Study Commencement Municipal Class Environmental Assessment Study to Provide Peaking Capacity for the UWSS has been posted in the local papers. He notes that the EA report should be completed in the Winter of 2024.

The flows are higher compared to last year and over the four (4) year average. He notes that the UWSS experienced the highest flows ever at the Ruthven WTP a few weeks ago. This is a combination of high heat and no rain in the area for 22 days.

Mayor Bondy asks if there are lawn watering restrictions in place. The Manager explains the by-laws. The recording secretary then explains to the board the watering times for residents to reduce stress on the system. Councillor Wilkinson asks if lawn watering affects the system on a larger scale. The Manager explains that at certain times of year lawn watering during peak hours does affect the system. Board members indicated they would share the lawn watering restrictions with their residents.

**No. UW-27-23**

Moved by: Deputy Mayor Verbeke

Seconded by: Deputy Mayor Walstedt

That report UW/13/23 dated June 16, 2023 re: Status Update of UWSS Operations & Maintenance Activities and Capital Works from May 12<sup>th</sup> to June 16<sup>th</sup> is received.

Carried (UW/13/23)

**Report UW/14/23 dated June 16, 2023 re: Presentation by Associated Engineering on UWSS Infrastructure Needs Study Report**

The Manager reminds members of the Board of the Infrastructure Needs Study started in October 2020, as part of the Masterplan. He then introduced the engineers working on the project, Vincent LaPlante and Robyn Casement, from Associated Engineering (AE).

The Manager briefly reviews the UWSS water treatment and distribution system, and notes that this year so far the water demands have really pushed the limit of the system. He further reminds members of the board that the UWSS has gaining infrastructure in the ground and a lot of assets in need of repair. He also indicates that many watermains are not sized properly for today's water system.

Minutes of the Special Meeting of Union Water Supply System Joint Board of Management

Date: June 21<sup>st</sup>, 2023

Page 4

The members of AE then begin going through their presentation explaining to the board that their study has shown there is a shortage in storage, most notably at the Ruthven WTP. They review some historical information as to how the system works and how the pressures and towers work to maintain the distribution system.

In conjunction with C3 Water their study also looked at the greenhouse demands and the projected growth in the area, looking ahead 5, 10, 20+ years. There is a brief discussion as to where the growth might occur in each municipality and whether that might be residential, commercial, or greenhouse growth.

AE reviewed UWSS's infrastructure and what it might need in the future and again notes that there is not enough storage. Ms. Casement also notes that water age is a slight factor through Cottam and could be cycled more. She further notes that the water mains going to Cottam carry a great deal of water and are in poor condition.

She then reviews three (3) alternatives to correct the UWSS system. She briefly explains each one, setting out the pros and cons of each. She then explains the budget of implementing such alternatives. The budget comes in at \$163 million.

The Manager then adds some context to the budget explaining that this is a staggered approach and that all capital items have a 30% contingency. He notes the first step in this large capital works budget is getting the Reservoir #3 in place, which is already underway. He further notes that the UWSS Corporation financial funding is based on the capital works presented and the model provided by financial consultant PwC indicates that this capital works budget can be accomplished with minimal rate increases of approximately 2%.

The board then asks several questions around growth and how that could affect this capital works plan. There is a small discussion around a raw water line for greenhouse users. The Manager notes that the larger service allocation application process will be amended and UWSS will be amending how allocation is provided.

The Manager indicates that the final report will be shared to the board members and the municipal staffs. He also indicates that items will eventually start moving through the new UWSS Inc. Board.

**No. UW-28-23**

Moved by: Mayor Bondy

Seconded by: Mayor Rogers

That report UW/14/23 dated June 16, 2023 re: Presentation by Associated Engineering on the UWSS Infrastructure Needs Study is received.

Carried

**New Business:**

There is none.

Minutes of the Special Meeting of Union Water Supply System Joint Board of  
Management

Date: June 21<sup>st</sup>, 2023

Page 5

---

**Adjournment:**

**No. UW-29-23**

Moved by: Councillor Tieseen

Seconded by: Councillor Dunn

Time adjourned: 10:44 am

**Date of Next Meeting:** July 19, 2023, 9:00 am, Kingsville Arena

/kmj

To: Chair and Members of the Union Water Supply  
System Joint Board of Management

From: Rodney Bouchard, UWSS General Manager

Date: July 14, 2023

Re: Status Update of UWSS Operations & Maintenance Activities and Capital  
Works from June 16 to July 14, 2023

---



**Aim:**

To inform the UWSS Board about operational and maintenance activities and capital works projects for the Union Water Supply System since the last Board meeting on June 21, 2023.

**Discussion:**

The UWSS General Manager conducts regular meetings with OCWA Operations staff in regards to on-going operations and maintenance programs for the UWSS facilities. The following provides an update on UWSS operations, regular maintenance and major maintenance and Capital Works at UWSS facilities:

1. On June 20, 2023, the mixer in Cottam Booster Reservoir #1 was noted by maintenance staff to be inoperative. Staff are working on a solution to repair/replace the mixer while the reservoir remains in service.
2. On June 22, 2023, operations staff noticed that Clarifier #4 scraper gear box was leaking some oil. This leak has been investigated by maintenance staff and is minor and is not causing any issues for the treatment process at this time. Maintenance staff are monitoring the gear box on a daily basis. Clarifier #4 will be taken out of service during the low flow season to complete necessary repairs.
3. The new "media" for the DAF #1 air dissolution tank was received on May 31, 2023. DAF #1 was taken out of service on June 27, 2023 to allow for installation of the new media. However, during installation, it was noted that the media appeared to be brittle and could cause issues with plugging of the DAF#1 aeration piping. The design engineer, Napier-Reid agreed that the new media should not be installed. DAF #1 was returned to service within the same day without the media. Napier-Reid is conducting further evaluation on media to identify a solution.
4. Napier-Reid was on site on June 29th, 2023 to assist OCWA maintenance staff with replacement of DAF#1 temporary rapid mixer with the permanent mixer. DAF#1 was returned to service the same day.
5. On June 30<sup>th</sup>, it was noted that Filter #7 "A" side slide gate valve was broken. Maintenance staff made necessary temporary repairs to allow for operation of the gate valve. A new valve was ordered and has been received. The valve will be replaced during low flow season.

Re: UW/15/23 - Status Update of UWSS Operations & Maintenance Activities and Capital Works from June 16 to July 14, 2023

---

6. On July 5<sup>th</sup>, maintenance staff replaced a chlorine injector for the Cottam Booster reservoir chlorine booster injection system. Operation staff had noted that the injector was not working properly.
7. Nevro Pumps and Mechanical on-site on July 14, 2023 to remove the motor from Cottam Booster Pump #4. Previous testing of the pump in May 2023 identified significant vibration in the pump motor thrust bearing. The pump will be taken to Nevro's shop in London for repair. It is anticipated that the pump will be reinstalled within 4 weeks of removal.
8. Nevro was on site on July 14, 2023 to remove the motor from High Lift pump #6. Previous vibration analysis conducted in June 2023 indicated that a motor bearing needs to be replaced. It is anticipated that the pump will be reinstalled within 4 weeks of removal.
9. C3 Water Inc. is making forward progress on the project to address the operational capacity and filling issues with the Albuna Water tower. The Phase 3 portion of the field testing work is underway. This work incorporates tests for partial increase in filling the tower, closing and opening valves in area of the tower, etc. to identify any issues.
10. The consulting team of C3 Water and Stantec Consulting is making forward progress with the conceptual design for an emergency water supply sharing solution between UWSS and Windsor Utilities Commission (WUC). A project meeting was held on July 5<sup>th</sup> to review revised Technical Memorandum #1, Operational Analysis and review draft Technical Memorandum #2 on Reservoir Locations, Sizing and Watermain Locations. The UWSS Board will be provided a more detailed update following issuance of the final TM#2 that incorporates comments by UWSS and WUC.
11. Associated Engineering (AE) is making forward progress on the conceptual and indicative design for the new proposed reservoir at the UWSS owned property adjacent the water treatment plant. Revised options on Alternate Project Delivery Approach (TM #7), demolition plan (TM#6) were reviewed with UWSS. A recommendation report will be provided to the UWSS Board for the July 19, 2023 meeting in regards to Alternative Project Delivery Approach.
12. UWSS has retained Stantec Consulting (Windsor office) to undertake design, engineering, project management services for upgrades to the Water Treatment Plant High Lift Pumping system to include a new High Lift Pump (HL#7) in the north clearwell. A budget of \$300,000 was approved in the 2023 UWSS budget for this work.
13. UWSS has retained Stantec Consulting to undertake evaluation, design, engineering and project management services for a new backup power generating system for the UWSS treatment plant and low lift plant. The existing backup generators for the water treatment and low lift facilities are undersized and are over 30 years old. A new backup generating system is needed to

Re: UW/15/23 - Status Update of UWSS Operations & Maintenance Activities and Capital Works from June 16 to July 14, 2023

---

- ensure reliability during power outages and to ensure adequate generating capacity for the entire system. Green solutions (e.g. solar power, batteries, etc) are being evaluated as part of the is work. This project is being completed under an approved 2023 UWSS capital budget item.
14. UWSS has retained C3 Water to undertake a pilot project for upgrades to billing meter chambers. This work will include full design, engineering, and project management for rehabilitation of 4 billing meter chambers. A budget of \$350,000 was approved for this work in the 2023 UWSS Budget.
  15. Summa Engineering (McRae Integration) has been retained to undertake upgrades to Filter PLC Panels 1 & 2. This work will include design, construction, and installation of the 2 PLC panels. Integration of the new panels within the SCADA system is also part of the scope of the work. This work is being completed under approved UWSS 2023 capital budget items.
  16. UWSS has retained JDC.ca Inc. to provide and install a new telephone system for the UWSS building facilities. JDC was selected as the preferred option from four proponents. The new telephone system will upgrade the existing and obsolete Nortel telephone system that has been in place for over 30 years. An approved budget of \$50,000 was included in the 2023 UWSS Budget.
  17. UWSS has retained Eramosa Engineering to install a data integration system at UWSS. This will include installation of the eRIS software platform that will integrate all the data that is received from the smart hydrant meters, data that will be received from the new instrumentation within billing meter chambers, water quality data from SCADA, etc. This work is being completed under an approved 2023 UWSS budget item for system components (\$150,000 budget).

The first chart shows comparative flows for 2019 through 2022 in Mega Litres (ML) and the second chart shows Millions of Imperial Gallons (MIG) for the period January 1<sup>st</sup> to July 13<sup>th</sup>, 2023.

	2019	2020	2021	2022	2023
Flow to Date (ML)	8,493.17	9,960.42	10,624.87	10,961.24	11,473.57
Max Day (ML)	84.84	97.33	93.83	99.17	108.68
Min Day (ML)	20.13	25.44	26.74	27.58	32.48
Average Day (ML)	43.78	51.08	54.77	56.50	59.14
No of Days	194	195	194	194	194

Re: UW/15/23 - Status Update of UWSS Operations & Maintenance Activities and  
Capital Works from June 16 to July 14, 2023

---

	2019	2020	2021	2022	2023
Flow to Date (MG)	1,868.27	2,191.03	2,337.19	2,411.85	2,523.87
Max Day (MGD)	18.66	21.41	20.64	21.81	23.91
Min Day (MGD)	4.43	5.60	5.88	6.07	7.14
Average Day (MGD)	9.63	11.24	12.05	12.43	13.01
No of Days	194	195	194	194	194

Flows to date are up 512.33 ML (112.02 MIG) or 4.6% from last year. The 2023 flows to date are up 14.6% over the previous 4-year average.

**Recommendation:**

That this report be received by the UWSS Board for information purposes.

Respectfully submitted,



Rodney Bouchard, General Manager  
Union Water Supply System Joint Board of Management

/kmj

**To:** Chair and Members of the Union Water Supply System Joint Board of Management

**From:** Rodney Bouchard, UWSS General Manager

**Date:** July 11, 2023

**Re:** Service Level Review of UWSS Operations and Contracted Operations and Maintenance Services



---

## Recommendation

It is recommended that the Union Water Supply System Joint Board of Management (Board) authorizes a budget of \$50,000 to be funded from UWSS Reserves to undertake a Service Level Review of UWSS Operations including contracted Operations & Maintenance Services for UWSS Facilities; and,

That the Board delegates authority to the UWSS General Manager to solicit and retain a consultant to complete the Service Level Review; and,

That the UWSS General Manager reports back to the Board by December 31<sup>st</sup>, 2023 with results and recommendations of the Service Level Review.

## Background

The Union Water Supply System (UWSS) is a municipal drinking water treatment and transmission system centered in Ruthven, Ontario that supplies drinking to the municipalities of Leamington, Kingsville, Essex and Lakeshore in Southwestern Ontario. UWSS is owned in common by these four municipalities. However, management of the system is the responsibility of a Joint Board of Management (UWSS JBM) consisting of 12 Board members appointed by the four (4) owner municipalities. The UWSS General Manager directs the overall administration of UWSS facilities on behalf of the Board, including budgeting and implementation of capital works and oversight of the Operations and Maintenance Agreement with the contracted operator.

The UWSS Board retains the Ontario Clean Water Agency (OCWA) to operate and maintain UWSS facilities, including the Ruthven water treatment plant, Low Lift pumping plant, Cottam Booster Station, four water towers and the common asset watermains & valves. The existing Operations and Maintenance Agreement (OMA) between UWSS and OCWA is a Fixed Management Fee Agreement (aka Cost Plus Agreement) that took effect on July 1, 2019. The agreement is for an initial term of 4 years and 6 months ending December 31<sup>st</sup>, 2023 with a 5-year renewal option.

## Discussion

In August 2022, the four owner municipalities of UWSS approved the re-organization of UWSS into a Joint Municipal Services Corporation (MSC) under O.Reg. 599/06 of the Ontario Municipal Act. Union Water Supply System Inc. (UWSS Inc.) was incorporated on February 24, 2023. The inaugural meeting of the UWSS Inc. Board of Directors was

Re: UW/16/23 - Service Level Review of UWSS Operations and Contracted Operations and Maintenance Services

---

held on July 7, 2023. At that meeting, the Board of Directors elected a Board Chair and Vice-Chair and appointed the UWSS corporate officers.

As part of the re-organization of UWSS, all management activities of the current UWSS JBM will be transferred over to UWSS Inc. Ownership of the existing UWSS assets will be transferred from the 4 municipalities to UWSS Inc. Further, it is the intent that UWSS Inc. will assume the existing OMA with OCWA from the UWSS JBM. This transition is scheduled for completion by December 31<sup>st</sup>, 2023.

As part of due diligence activities relating to the transition from the current Joint Board of Management structure to the MSC structure, the UWSS proposes to undertake a Service Level Review of the UWSS operations including the Operations and Management services currently provided by OCWA.

The purpose of the Service Level Review is to identify the best option for delivery of internal and contracted O&M services for UWSS facilities under the new UWSS Inc. corporate structure. The review will include the following components:

- Evaluation of internal project management capabilities for delivery of UWSS capital works and operational studies.
- Evaluation of O&M services currently provided by OCWA as per the existing OMA.
- Identification of O&M service delivery options for external contracted service delivery and internal “in-house” service delivery.
- Review of O&M service delivery at other water utilities and municipalities with similar size customer base as UWSS.
- Evaluation and comparison of identified options using a risk assessment approach (e.g. operational and financial risks, etc).

The final deliverable of the Service Level Review will be a final comprehensive report that provides the following:

- Details the service level review methodologies.
- Provides recommendations on UWSS staffing requirements for delivery of capital projects and operational programs.
- Provides recommendations on preferred option for O&M service delivery for UWSS facilities.
- Provides a proposed implementation schedule for the recommended improvements/ alternatives.

The intent is to complete this review by November 30th, 2023.

UWSS wants to ensure that the Service Level Review is completed in a professional, transparent, and unbiased manner. As such, the UWSS proposes to solicit proposals from qualified consulting firms that have not previously provided any services to UWSS. Further, the UWSS proposes to create an external peer review team to provide input in identifying qualified consultants for this work, assist in reviewing received proposals and assist with evaluating final report recommendations.

Re: UW/16/23 - Service Level Review of UWSS Operations and Contracted  
Operations and Maintenance Services

---

It should be noted that the UWSS General Manager is a Director on the Canadian Water and Wastewater Association (CWWA) Board of Directors and a member of the Canadian Water Network Municipal Consortium Leadership Team. This has allowed the UWSS General Manager access to an extended network of water and wastewater industry professionals. The UWSS General Manager is currently in discussions with trusted industry colleagues that have extensive experience in contract management and service level reviews to solicit their interest in participating on the external review team. The intent is to establish a peer review team with a minimum of 3 and a maximum of 5 participants.

### Closing Comments

The transition of UWSS from the current Joint Board of Management structure to a Municipal Services Corporation provides a timely opportunity for the undertaking of a review of UWSS internal capital works and operational program delivery and contracted Operations and Maintenance services. The intent of such a review is to identify improvements that will improve efficiency of internal service delivery and identify options and provide recommendations for Operations and Maintenance services that are currently delivered by OCWA.

Respectfully submitted,



Rodney Bouchard, General Manager  
Union Water Supply System

/kmj

**To:** Chair and Members of the Union Water Supply System Joint Board of Management

**From:** Rodney Bouchard, UWSS General Manager

**Date:** July 13, 2023

**Re:** UWSS Asset Management Strategy and Asset Management Plan



---

## Recommendation

It is recommended that the Union Water Supply System Joint Board of Management (Board) authorizes a budget of \$110,000 to be funded from UWSS Reserves to develop an Asset Management Strategy and prepare an Asset Management Plan for UWSS; and,

That the Board authorizes the UWSS General Manager to award a contract in the amount of \$96,200 (excluding HST) to Associated Engineering to develop and prepare the UWSS Asset Management Strategy and Asset Management Plan.

## Background

The Union Water Supply System (UWSS) is a municipal drinking water treatment and transmission system that supplies drinking to the municipalities of Leamington, Kingsville, Essex and Lakeshore in Southwestern Ontario. UWSS is owned in common by these four municipalities.

As an entity wholly owned by several municipalities, the UWSS has been required to conform to the accounting standard PS3150 which governs Tangible Capital Assets. In January 2009, the Board adopted Policy UW F06-2008 Finance Policy - Tangible Capital Assets. The policy was amended in July 2010 by the UWSS Board. A copy of the policy is attached to this document. As part of PS3150, the UWSS is required to track the value, cost, etc. of its Tangible Capital Assets (TCAs) in the following Asset Categories:

- Land / Land Improvements
- Buildings/ Building Improvements
- Infrastructure - Linear Assets
- Vehicles
- Machinery and Equipment

Data tracking and reporting and management of database for UWSS TCAs is completed by the Municipality of Leamington financial staff as part of services that are provided by Municipality of Leamington to UWSS.

Apart from the requirements of PS3150, the UWSS has not implemented any formal Asset Management Strategy or developed any Asset Management Plans.

## Discussion

In August 2022, the four owner municipalities of UWSS approved the re-organization of UWSS into a Joint Municipal Services Corporation (MSC) under O.Reg. 599/06 of the Ontario Municipal Act. Union Water Supply System Inc. (UWSS Inc.) was incorporated on February 24, 2023. As part of the re-organization of UWSS, ownership of the existing UWSS assets will be transferred from the 4 municipalities to UWSS Inc.

It is to be noted that the UWSS treatment and transmission system was commissioned in 1960. Significant improvements have been made over the years to the pumping plant, treatment plant, Cottam booster and elevated water towers. However, minimal renewal has been undertaken to the trunk transmission assets (watermains) since their original construction. As part of the UWSS restructuring, a financial plan and model has been developed to fund the complete renewal of the system over the next 50 years.

The UWSS has undertaken several assessments and needs studies since 2015 which have mainly been focused on projected growth and water quality related issues. These assessments do not fulfil the requirements of Ontario Regulation (O-Reg.) 588/17 for asset management policies/strategies and Asset Management Plans. With UWSS restructuring into a Municipal Services Corporation under the Municipal Act, 2001, the development of an Asset Management strategy and Asset Management Plan (AMP) will be a necessity. This strategy and accompanying AMP will ensure that UWSS' long-term investment in renewal of its assets is successful.

The UWSS General Manager has solicited a proposal and workplan from Associated Strategic Advisory Services, a division of Associated Engineering (Associated) for the development of an Asset Management Strategy and preparation of Asset Management Plan(s) for UWSS that would meet or exceed the requirements of O-Reg. 588/17. The UWSS General Manager proposes to engage AE for this work due to their significant knowledge of the physical aspects and operating regime of UWSS' water system and because of their professionalism and responsiveness in recent work completed and/or on-going with UWSS.

Associated provided a proposal dated July 7, 2023 for these services. A copy of the July 7, 2023 proposal and fee letter is attached to this report. As per the proposal, deliverables for this work will include the following:

- Strategic Asset Management Policy
- Comprehensive Asset Management Plan in accordance with O-Reg. 588/17

As per the schedule outline in the proposal, the final version of the Asset Management Policy and AMP would be provided for presentation to the UWSS Board by December 15, 2023. This assumes that the project is awarded before the end of July 2023.

## Financial Impact

Re: UW/17/23 - UWSS Asset Management Strategy and Asset Management Plan

The July 7, 2023 proposal by Associated for the development of an Asset Management Policy/Strategy and Asset Management Plan for UWSS includes a fee estimate of \$96,200

The UWSS General Manager proposes a budget of \$110,000 for this work, which would include a contingency of approximately 15% above the fee identified in the proposal. A budget for this work is not included in the approved 2023 UWSS Budget. It is noted that UWSS has sufficient funds in its reserves to fund this project.

### Closing Comments

The transition of UWSS from the current Joint Board of Management structure to a Municipal Services Corporation provides a timely opportunity for UWSS to develop an Asset Management Policy/Strategy and prepare an Asset Management Plan that meets the requirements of O-Reg. 588/17. It is envisioned that this strategy and plan would be completed prior to the full transition of UWSS operations and assets to UWSS Inc., which is scheduled to take place January 1, 2024.

Based on their familiarity with the UWSS and the professional quality services provided to UWSS on recent and on-going projects, the UWSS General Manager recommends that this work be awarded to Associated Engineering.

Respectfully submitted,



Rodney Bouchard, General Manager  
Union Water Supply System

/kmj



**Associated Engineering (Ont.) Ltd.**  
Suite 200, 165 Commerce Valley Drive West  
Markham, ON L3T 7V8 Canada  
[www.ae.ca](http://www.ae.ca)

July 7, 2023  
File: P23-00917

TEL: 416.622.9502

Rodney Bouchard, P.Geo.  
General Manager  
Union Water Supply System  
P.O. Box 340  
1615 Union Avenue  
Ruthven, ON N0P 2G0

**Re: UWSS ASSET MANAGEMENT STRATEGY AND ASSET MANAGEMENT PLAN  
DEVELOPMENT  
SCOPE/FEE LETTER**

Dear Mr. Bouchard:

## **1 PROJECT UNDERSTANDING**

The Union Water Supply System (UWSS) is currently going through a process of incorporation that will provide an increased level of ownership and autonomy for the UWSS and increase ability to raise finance to support investment needs. The new organization will be a municipal entity and subject to the municipal regulations in the province of Ontario.

Current governance and management include the Board, made up of representatives of the four owning municipal counties, two administrative staff – the CEO and administrative support – and outsourced operations to Ontario Clean Water Agency. The current establishment would like to review the potential of insourcing operations from OCWA, develop appropriate policies and procedures and develop a more sustainable organization for the management of the approximately \$150M of infrastructure.

The system itself currently provides bulk water services to approximately 70,000 to 75,000 people and provides water to extensive greenhouse operations in the region. The major trunk system was largely developed in 1959 and there has been very little renewal since this time. The expectation is that the system will need complete renewal over the next 50 years.

While UWSS has undertaken several system assessments and needs studies, they have a focus on growth and water quality related issues and do not fulfil the requirements of O-Reg 588/17 for asset management policy/strategy nor for asset management plans. A long-term investment forecast has been initiated and will provide visibility of high-level investment needs into the future. It is based on Tangible Capital Asset (TCA) information; however, this long-term investment forecast lacks the detail to provide insight into specific investment needs for a 10-year outlook.



July 7, 2023  
Rodney Bouchard, P.Geol.  
Page 2

UWSS would like to support the preparation of a more sustainable water utility through the development of a Strategic Asset Management Policy in line with the requirements of O-Reg 588/17. The Strategic Asset Management Policy will form a longer-term guiding document for the new utility. The Strategic Asset Management Policy will meet the minimum requirements as set in O-Reg 588/17 and will also incorporate or be aligned with the principles of Effective Utility Management and ISO 55001.

The Strategic Asset Management Policy will be supported by one or more asset management plans (to be determined by the asset management strategy). These plans will likely draw on much of the work already completed by the Infrastructure Needs Assessment and other studies, both for asset information and investment needs related to growth and water quality levels of service.

## **2 CORPORATE EXPERIENCE**

Associated Engineering has worked extensively with UWSS and maintains a good working relationship with UWSS staff. As such we feel that we are well placed to leverage our knowledge and expertise gained when developing the Infrastructure Needs Assessment and other studies to undertake this work. In addition, Associated has undertaken many asset management strategies and asset management plans including for water systems in Canada and internationally. We can provide relevant project references upon request.

## **3 TEAM**

Our team will be led by Vincent Laplante who is currently working with UWSS and has built a trusted relationship with the General Manager over recent years. Vincent will maintain the client relationship and continue to confirm that the level of service expected by UWSS is provided by the project team.

Vincent will be supported by a team of asset management experts drawing on staff from both Ontario and Alberta. Owen James will provide corporate oversight of the work. Ryan Woodhouse will lead technical development.

CVs have not been appended but can be provided upon request.

## **4 APPROACH**

Our approach for this assignment is as follows:

- To work with the UWSS staff but take the lead on development of the Strategic Asset Management Policy and the Asset Management Plan for the UWSS.

- The work is largely anticipated to be completed virtually but we have planned two in-person workshops or meetings. The first workshop will be undertaken during the development of the strategy in September and include the administration team including the CEO, and may also include representation from OCWA and the current owning municipalities if appropriate. The second meeting will be the presentation of the strategy and plan in November or December and can include the current administration and any new staff and also the Board if appropriate.
- Much of the work will be developed from existing information and studies. We have not planned for any on-site evaluation of current asset condition or other attributes but will use existing information.
- The work will primarily be guided by the O-Reg 588/17 as the base requirement however, the team will also seek to develop a framework for the sustainable management of the water supply system using the principles of *Effective Utility Management* and *ISO55001* as appropriate, combined with our experience of working with other utility organizations in Canada.
- A work plan has been developed below that will make initial progress through the summer period but then support more collaboration in the fall of 2023 with completion before year end.
- While the work will largely be developed by Associated with guidance and input from UWSS staff, it is fully our intent that the work builds the capacity and awareness of existing and any potential new staff. The policy and plan will therefore be provided, not as reports provided to UWSS but as Union Water documents for subsequent ongoing maintenance and updating.

## 5 WORKPLAN

Our proposed workplan for the project is as follows:

### 1.0 Project Initiation

- Kick off meeting (Virtual) – review of plan and expectations, confirmation of interested parties who may need to be involved in the strategy and plan development or who can provide input to the documents.

### 2.0 Information Review and Framework Set-Up

- Develop Strategic Asset Management Policy and Asset Management Plan structure in line with O-Reg 588/17. The Framework Set-up will include reviewing alignment of O-Reg requirements with ISO 55001 or EUM Framework;
- Review information available including previous studies, asset inventories and other sources of information; and
- Make information request for further information (e.g. from owning municipalities and OCWA if possible).

### 3.0 Compile Strategic Asset Management Policy

- Strategic Asset Management Policy workshop (in-person) – CEO / Administrator. Potentially other interested parties will be discussed with the CEO in advance and may include OCWA and representatives from owning municipalities.
- Compile information for Strategic Asset Management Policy and populate in line with O-Reg 588/17 Requirements:
  - Goals, and policies and plans supported by the strategy.
  - Process for using AMP in budget development and long-term financial plan.
  - Approach to continuous improvement.
  - Principles to be followed in municipal asset management planning.
  - Commitment to address climate change in operations, LOS, lifecycle mgt, including costs arising from vulnerabilities, adaptation opportunities, mitigation approaches, contingency funding.
  - Process for aligning asset management planning with financial plans.
  - Process to ensure alignment with Ontario land use planning framework, Provincial Plans and OCPs.
  - Explanation of capital thresholds for defining scope of assets and alignment with TCA policy.
  - Commitment to coordination across tiers of government and with neighbouring municipalities.
  - The people responsible for asset management planning
    - Include evaluation of resources required to run and manage the utility.
  - Explanation of municipal councils' involvement in asset management planning.
  - Commitment to engage residents and interested parties.

#### Scope limitations:

The organization and governance of the system is a key factor in determining several requirements indicated in the list above. Typically, any significant structural change in organization would lead to an updating of the Strategic Asset Management Policy. The project team will endeavour to develop the Strategic Asset Management Policy in line with the new Union Water Supply System Inc. organization. However, we recognize that there may still be some uncertainties around responsibilities especially given the desire for evaluating best approach for delivering operational activities. Where uncertainties exist, the relevant sections of the policy will be flagged for review given different triggers.

### 4.0 Compile Asset Management Plant (AMP)

- Check in workshop (virtual) towards late October
- Compile AMP in line with O-Reg 588/17
  - Current LOS provided for last 2 years.

- Current performance of asset categories.
- Summary of assets, replacement cost, condition, approach to assessing condition.
- Lifecycle activities to maintain current LOS for 10 years and costs.
- Population and employment forecasts.
- Capital and operational cost forecasts for 10 years.
- How information will be made public.
- Action plan for evaluating proposed LOS and reporting additional requirements of O-Reg 588/17 by July 1, 2024.
- Statement of endorsement and place to indicate approval.
- Plan for annual review of progress.

#### Scope limitations:

In the development of the Asset Management Plan(s) (AMP) we recognize that they may be limited by the information available which may compromise the integrity of the AMP. While the project team will endeavour to overcome shortfall in data and information as best we can within the budget available, it is more likely than an improvement action will be identified to address the issue and incorporated appropriately.

Our work plan allows for the development of a single integrated asset management plan document that may be divided into subsections to account for the variety of asset classes in the water supply system. While separate asset management plans for each asset class may be identified within the strategic asset management policy, it is unlikely that this can be achieved within the budget available. The building out of more detailed asset management plans for different asset classes may be identified as an improvement action if appropriate.

#### 5.0 Presentation and Approval of Strategy and Plans

- Presentation preparation and delivery (in-person)

#### 6.0 Publishing of documents

- UWSS publishes documents in accordance with O-Reg 588/17.

#### Deliverables

- Strategic Asset Management Policy (draft, final, word and PDF format)
- Asset Management Plans (draft, final word and PDF format)

#### Limitations:

Several scope limitations have been indicated in the sections above. The project team will endeavour to work with UWSS staff to provide deliverables that are most suitable to the new utility organization



July 7, 2023  
 Rodney Bouchard, P.Geo.  
 Page 6

and work to be agile and responsive to changes in priority or needs. Where a change or additional requirement is material from the level of effort anticipated in the work plan and fee schedule, the change will be discussed with the CEO and managed through scope change or the identification of an action for incorporation in the improvement plan (either in the Strategic Asset Management Policy or in the Asset Management Plan).

## 6 SCHEDULE

Task	Estimated Completion
Task 1.0 - Project Initiation and Management	July 31 <sup>st</sup> 2023
Task 2.0 - Information Review and Framework Set-Up	August 30 <sup>th</sup> 2023
Task 3.0 - Strategic Asset Management Policy Workshop	Mid September
Compilation of Strategic Asset Management Policy	September 30 <sup>th</sup> 2023
Task 4.0 - Asset Management Plan Workshop	Late October
Compilation of Asset Management Plan	October 31 <sup>st</sup> 2023
Task 5.0 - Presentation Development & Delivery	Draft – November 30 <sup>th</sup> 2023 Final – by December 15 <sup>th</sup> 2023
Project Close Out	December 31 <sup>st</sup> 2023

As noted earlier, under O-Reg 588/17, the Strategic Asset Management Policy and Asset Management Plans are required to be published. This will be the responsibility of UWSS.

## 7 FEE

Our estimated fee for completing the work is a lump sum not to exceed amount of \$96,200.00 including disbursements and excluding HST to be billed on a percent complete basis as outlined in the summary table below and attached time task matrix:

Task	Fee
Task 1.0 - Project Initiation and Management	\$9,900
Task 2.0 - Information Review and Framework Set-Up	\$8,500
Task 3.0 - Strategic Asset Management Policy	\$32,300



July 7, 2023  
 Rodney Bouchard, P.Geo.  
 Page 7

Task	Fee
Task 4.0 - Asset Management Plan	\$32,500
Task 5.0 - Presentation Development & Delivery	\$13,000
TOTAL	\$96,200

## 8 CLOSURE

We thank you for the opportunity to submit this proposal for developing an asset management strategy and asset management plan for the UWSS. If you have any questions or want to discuss any aspect of this proposal, please do not hesitate to contact the undersigned.

Yours truly,

A handwritten signature in blue ink, appearing to read 'Elia Edwards'.

Vincent Laplante, P.Eng.  
 Project Manager

Elia Edwards, M.A.Sc., P.Eng.  
 Manager, Water Division

VL/oj

In accordance with Canadian anti-spam legislation, the recipient consents to Associated Engineering contacting the recipient and its personnel through electronic messages relating to Associated Engineering's services and other matters of interest to the recipient. The recipient

TASK	Task Description	Vincent Laplante Project Manager	Owen James Senior Advisor	Ryan Woodhouse Asset Management Advisor	Senior Project Support	Engineering Support	Administration Support	Total Hours	Fees	Disbursements	Travel Expenses	TASK FEES	TOTAL FEES
	Classification	<b>E5</b>	<b>R6</b>	<b>R4</b>	<b>T7</b>	<b>E1</b>	<b>S4</b>						
	Hourly Rates	<b>\$ 215</b>	<b>\$ 260</b>	<b>\$ 200</b>	<b>\$ 200</b>	<b>\$ 130</b>	<b>\$ 125</b>						
<b>1</b>	<b>Project Initiation and Management</b>												\$ 9,900
1.1	Establish Project - PIO, PMP, QMP, Agreement	3.0	-	-	-	-	1.0	4.0	\$ 770	\$ 23	\$ -	\$ 793	
1.2	Project Kick off meeting (virtual)	2.0	2.0	2.0	-	-	-	6.0	\$ 1,350	\$ 41	\$ -	\$ 1,391	
1.3	Invoicing and reporting	6.0	-	4.0	-	-	4.0	14.0	\$ 2,590	\$ 78	\$ -	\$ 2,668	
1.4	Communications	8.0	6.0	8.0	-	-	-	22.0	\$ 4,880	\$ 146	\$ -	\$ 5,026	
	<i>Subtotal Hours</i>	<i>19.0</i>	<i>8.0</i>	<i>14.0</i>	<i>-</i>	<i>-</i>	<i>5.0</i>	<i>46.0</i>					
	<i>Subtotal Fees</i>	<i>\$ 4,085</i>	<i>\$ 2,080</i>	<i>\$ 2,800</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ 625</i>		<i>\$ 9,590</i>	<i>\$ 288</i>	<i>\$ -</i>	<i>\$ 9,878</i>	
<b>2</b>	<b>Information Review and Framework Set-Up</b>												\$ 8,500
2.1	Draft AM Strategy/policy and AM Plan Structure	1.0	2.0	8.0	4.0	-	-	15.0	\$ 3,135	\$ 94	\$ -	\$ 3,229	
2.2	Review information available to support	1.0	2.0	16.0	4.0	-	-	23.0	\$ 4,735	\$ 142	\$ -	\$ 4,877	
2.3	Make request for additional information	1.0	-	1.0	-	-	-	2.0	\$ 415	\$ 12	\$ -	\$ 427	
	<i>Subtotal Hours</i>	<i>3.0</i>	<i>4.0</i>	<i>25.0</i>	<i>8.0</i>	<i>-</i>	<i>-</i>	<i>40.0</i>					
	<i>Subtotal Fees</i>	<i>\$ 645</i>	<i>\$ 1,040</i>	<i>\$ 5,000</i>	<i>\$ 1,600</i>	<i>\$ -</i>	<i>\$ -</i>		<i>\$ 8,285</i>	<i>\$ 249</i>	<i>\$ -</i>	<i>\$ 8,534</i>	
<b>3</b>	<b>Compilation of AM Strategy &amp; Policy</b>												\$ 32,300
3.1	Draft Policy/strategy	2.0	4.0	40.0	4.0	8.0	-	58.0	\$ 11,310	\$ 339	\$ -	\$ 11,649	
3.2	Policy/Strategy Workshop (in-person)	8.0	8.0	2.0	8.0	-	-	26.0	\$ 5,800	\$ 174	\$ 1,800	\$ 7,774	
3.3	Compile policy / Strategy	2.0	8.0	30.0	16.0	-	6.0	62.0	\$ 12,460	\$ 374	\$ -	\$ 12,834	
	<i>Subtotal Hours</i>	<i>12.0</i>	<i>20.0</i>	<i>72.0</i>	<i>28.0</i>	<i>8.0</i>	<i>6.0</i>	<i>146.0</i>					
	<i>Subtotal Fees</i>	<i>\$ 2,580</i>	<i>\$ 5,200</i>	<i>\$ 14,400</i>	<i>\$ 5,600</i>	<i>\$ 1,040</i>	<i>\$ 750</i>		<i>\$ 29,570</i>	<i>\$ 887</i>	<i>#####</i>	<i>\$ 32,257</i>	
<b>4</b>	<b>Compilation of AM Plan</b>												\$ 32,500
4.1	Draft AMP in line with structure - compiled from other work	4.0	2.0	40.0	20.0	8.0	-	74.0	\$ 14,420	\$ 433	\$ -	\$ 14,853	
4.2	Check in workshop on AMP	3.0	3.0	5.0	3.0	-	-	14.0	\$ 3,025	\$ 91	\$ -	\$ 3,116	
4.3	Finalize AMP	4.0	4.0	40.0	16.0	8.0	-	72.0	\$ 14,140	\$ 424	\$ -	\$ 14,564	
	<i>Subtotal Hours</i>	<i>11.0</i>	<i>9.0</i>	<i>85.0</i>	<i>39.0</i>	<i>16.0</i>	<i>-</i>	<i>160.0</i>					
	<i>Subtotal Fees</i>	<i>\$ 2,365</i>	<i>\$ 2,340</i>	<i>\$ 17,000</i>	<i>\$ 7,800</i>	<i>\$ 2,080</i>	<i>\$ -</i>		<i>\$ 31,585</i>	<i>\$ 948</i>	<i>\$ -</i>	<i>\$ 32,533</i>	
<b>5</b>	<b>Presentation Development and Delivery</b>												\$ 13,000
5.1	Presentation preparation	4.0	4.0	16.0	8.0	-	3.0	35.0	\$ 7,075	\$ 212	\$ -	\$ 7,287	
5.2	Presentation delivery (in-person)	8.0	8.0	-	-	-	-	16.0	\$ 3,800	\$ 114	\$ 1,800	\$ 5,714	
	<i>Subtotal Hours</i>	<i>12.0</i>	<i>12.0</i>	<i>16.0</i>	<i>8.0</i>	<i>-</i>	<i>3.0</i>	<i>51.0</i>					
	<i>Subtotal Fees</i>	<i>\$ 2,580</i>	<i>\$ 3,120</i>	<i>\$ 3,200</i>	<i>\$ 1,600</i>	<i>\$ -</i>	<i>\$ 375</i>		<i>\$ 10,875</i>	<i>\$ 326</i>	<i>#####</i>	<i>\$ 13,001</i>	
	<b>Project Total Hours</b>	<b>57.0</b>	<b>53.0</b>	<b>212.0</b>	<b>83.0</b>	<b>24.0</b>	<b>14.0</b>	<b>443.0</b>					
	<b>Project Total Fees</b>	<b>#####</b>	<b>\$ 13,780</b>	<b>\$ 42,400</b>	<b>#####</b>	<b>\$ 3,120</b>	<b>\$ 1,750</b>		<b>\$ 89,905</b>	<b>\$ 2,697</b>	<b>#####</b>		<b>\$ 96,200</b>

POLICY No: UW F06-2008 Finance Policy – Tangible Capital Assets

Date Adopted: January 21, 2009

Amended: July 8, 2010

## **PURPOSE**

The purpose of this policy is to achieve compliance with the Public Sector Accounting Board (PSAB) Handbook Section PS 3150 (Attachment I). It provides overall direction for the capitalization of assets, technical guidance in the creation of a tangible capital assets accounting system and addresses areas of PSAB PS 3150 that may require professional judgement. In addition, it provides a framework in which to make consistent and sound decisions, plan ahead for future needs and provide public confidence in accounting and financial reporting processes.

## **SCOPE**

All tangible property owned in common by the participating municipalities and controlled by the Joint Board of Management (JBM) on their behalf, either through donation or purchase, and which qualifies as a tangible capital asset is included in the scope of this Policy.

## **DEFINITIONS**

### ***Board***

This is the JBM of the Union Water Supply System (UWSS) established under the Transfer Order Union WI/1999 to manage the system on behalf of the owner municipalities.

### ***Municipalities***

This is the four participating municipalities in the system, the Municipality of Leamington, and the Towns of Kingsville, Essex and Lakeshore.

### ***Tangible Capital Assets***

In accordance with PSAB PS 3150, tangible capital assets are non-financial assets having physical substance that

- i. are held for use in the production or supply of goods or services, for rental to others, for administrative purposes or for the development, construction, maintenance or repair of other tangible capital assets;
- ii. have useful economic lives extending beyond an accounting period;
- iii. are to be used on a continuing basis; and
- iv. are not for sale in the ordinary course of operations.

Tangible Capital Assets are recorded at historical cost. Where historical cost information is not available, valuation approaches such as appraisals, the deflated replacement cost, the deflated reproduction cost or fair value are to be applied where appropriate.

**Cost** as defined by PSAB PS 3150, is the gross amount of consideration given up to acquire, construct, develop or better a TCA, and includes all costs directly attributable to acquisition, construction, development or betterment of the TCA, including installing the asset at the location and in the condition necessary for its intended use. The cost of a contributed TCA, is considered to be equal to its fair value at the date of contribution. Capital grants are not to be netted against the cost of the related TCA. The cost of a leased TCA is determined in accordance with Public Sector Guidelines PSG-2, Leased Tangible Capital Assets.

**Fair Value** is the amount of the consideration that would be agreed upon in an arms length transaction between knowledgeable, willing parties who are under no compulsion to act. For assets controlled by the Board but not paid for by the Board including contributions, gifts and donations, valuation may be assessed by fair value.

**Amortization** is the accounting process of allocating the cost less the residual value of a tangible capital asset to operating periods as an expense over its useful life in a rational and systematic manner appropriate to its nature and use. Amortization expense is an important part of the cost associated with providing drinking water services, regardless of how the acquisition of tangible capital assets is funded. Depreciation accounting is another commonly used term to describe the amortization of tangible capital assets.

Amortization is an annual charge to expenditures for the use of a capital asset. The Board sets amortization rates on a straight line basis based on the number of years in service less residual value. It is calculated the month the asset is put into service. Economic useful life is used for amortization rather than physical useful life. Attachment III provides a general rule for useful life. **Note:** All assets acquired prior to 2008 have been assumed to be acquired on January 1 of the year of acquisition. *All assets acquired prior to 2008 have been assumed to be acquired July 1 of the year of acquisition.*

**Write Downs** of assets occur when a reduction in the future economic benefit is expected to be permanent and the value of future economic benefit is less than the TCA's net book value. A write down should not be reversed. Further information regarding write downs may be found in PSAB 3150 – Tangible Capital Assets Standard from the CICA Handbook.

**Betterments** are subsequent expenditures on tangible capital assets that significantly:

- a. Increase previously assessed physical output or service capacity;
- b. Lower associated operating costs;
- c. Extend the useful life of the asset; or
- d. Improve the quality of the output

Any other expenditure would be considered a repair or maintenance and expensed in the period incurred.

**Capitalization** is the accounting process of recognizing an asset and recording its value.

**In Service Date** is realized as the date at which an asset begins to be utilized by the Board. The calculation and recording of amortization will not begin until the “in service” date has been reached.

**Pooled Assets** have a unit value below the capitalization threshold but have a material value as a group. These assets are recorded as a single asset with one combined value. Examples could include major computer components such as servers, furniture and fixtures, etc.

## ASSET CATEGORIES

The level of detail required in the capital asset inventory is a balance between the cost of data collection, tracking and analysis and the beneficial use of the information gathered. A category of assets is a grouping of assets of a similar nature or function in the Board’s operations. The following list of categories and sub-categories shall be used:

ASSET CLASS/SEGMENT	TYPE OF ASSET
Land	Land (all land except land for resale)
Land Improvements	Fencing, Artificial Turfs, Retaining Walls, Etc.
Buildings	Structure, Site Elements, Interior Components, Exterior Components, Mechanical/Electrical System, Elevator, Site Services, Fire & Safety
Building Improvements	Improvements to Existing Buildings
Infrastructure - Linear Assets	Watermains, Parking Lots, vehicles leased by the contracted operating authority and paid for through the operating agreement
Vehicles	Licensed Vehicles & Equipment
Machinery & Equipment	Unlicensed Vehicles & Equipment, Attachments / Fixtures, Operational, Misc. Equipment, IT Hardware & Peripherals, Radio Equipment, Other

## CAPITALIZATION THRESHOLDS

Capitalization thresholds are established to determine whether expenditures are to be capitalized as assets and depreciated or treated as current year expenditures. For financial reporting purposes thresholds are set fairly high, however, details may be useful for the Board’s capital asset management program. Therefore, an optimal threshold for each asset category is a balance between the two.

The Board's capitalization thresholds are set based on information gathered from various industry sources and experts combined the consideration of the materiality of the asset category.

Tangible capital assets should be capitalized according to the following thresholds:

<b>ASSET CLASS/SEGMENT</b>	<b>CAPITALIZATION THRESHOLD</b>
Land	Capitalize All
Land Improvements	\$5,000
Infrastructure - Linear Assets	Capitalize All
Buildings	\$5,000
Building Improvements	\$5,000
Machinery & Equipment	\$5,000
Vehicles	\$5,000

Betterments are to be capitalized using the above-mentioned thresholds.

Acquisition and betterment costs that do not exceed the threshold shall be expensed in the period incurred. These items shall be charged against the operating budget of the department that acquired the asset.

Thresholds apply to capital goods purchased and capital projects constructed with the total cost of the good or project meeting the capitalization threshold criteria. Long term assets that do not individually meet threshold limits but do meet threshold limits when pooled are to be capitalized. The value of pooled assets must be equal to or exceed a threshold of \$5,000. Like assets are grouped to form a pool, e.g. system meters.

Further refinement to threshold levels will occur as the Board develops an understanding of its asset and reporting needs. Improvements are capitalized as an asset betterment when they extend the useful life of the asset.

## **CLASSIFICATION, AGGREGATION & SEGMENTATION**

### **LAND**

Land owned by the municipalities in common includes land for Board managed facilities. All land owned by the Municipalities in common is segmented by each parcel held. Land for system facilities and leased facilities is quantified and included in the Board's land database.

## **LAND IMPROVEMENTS**

Land improvements include fencing. Each asset when capitalized is separately recorded with an attached useful life.

## **BUILDINGS**

Buildings owned by the municipalities in common and controlled by the Board include the Ruthven WTP, the Low Lift Pump Station, the Cottam Booster Station and Reservoir and elevated water towers. A building is segmented by base building (envelope), roof and HVAC based on useful life. This treatment provides for capital replacement of each component over the years of ownership.

## **BUILDING IMPROVEMENTS**

Building improvements include fixtures and equipment along with interior fit-outs required to make the building ready for use. Fixtures and fit-outs are capitalized if purchased in volume and the volume exceeds the threshold limit or if the individual cost of items exceeds the threshold.

## **CONSTRUCTION IN PROGRESS**

Construction in progress contains capital projects underway but not complete or put to use. These projects are individually segmented and are inventoried if costs exceed threshold limits, and then capitalized when ready for use.

The costs includes all costs directly attributable to the acquisition, construction or development of an asset. Carrying costs such as internal design, inspection etc., may be capitalized. General administrative costs should not be capitalized.

Capitalization of carrying costs ceases when there is no construction occurring or the tangible capital asset is ready for use.

## **INFRASTRUCTURE - LINEAR ASSETS**

The water system components include and are segmented by water mains, valves, and meter chambers. Aggregation for threshold purposes is by capital project. Capital projects when complete are recorded as assets by allocating costs to each component part.

## **MACHINERY & EQUIPMENT**

### **TECHNOLOGY/COMMUNICATIONS**

IT infrastructure includes hardware, infrastructure, computers, printers, scanners, photocopiers and the telephone network. IT infrastructure is capitalized if each purchase or project meets threshold limits. Computers and printers, scanners, photocopiers, etc. are capitalized and included in the appropriate asset pool.

**ALL OTHER MACHINERY & EQUIPMENT**

Machinery and equipment are inventoried at the asset level and pooled for threshold purposes.

**VEHICLES**

Vehicles are inventoried at the asset level and grouped according to useful life.

**TCA INVENTORY – OWNERSHIP**

Ownership of assets requires safeguarding, maintenance, amortization for replacement and possibly write-downs. These requirements are addressed in this section.

It is the responsibility of the UWSS Manager and staff members to ensure capital assets assigned to his or her custody are maintained, safeguarded and accurately reflected in the asset inventory. The UWSS Manager will monitor the contracted operating authority to ensure capital assets assigned to its custody are maintained, safeguarded and accurately reflected in the asset inventory.

Amortization is an annual charge to expenditures for the use of a capital asset. The Municipality sets amortization rates on a straight line basis based on number of years in service less salvage value. The asset categories are amortized as follows:

<b>Asset Class / Segment</b>	<b>Amortization of Cost less Savage Value</b>
Land	Not amortized
Land Improvements	Not amortized / Straight line over useful life of asset
Buildings	Straight line over useful life of asset
Building Improvements	Straight line over useful life of asset
Construction in Progress	Not amortized
Machinery & Equipment	Straight line over useful life of asset less salvage value
Vehicles	Straight line over useful life of asset less salvage value
Infrastructure - Linear Assets	Straight line over average useful life of asset

Amortization is calculated based on a half year rule, meaning that the asset is amortized for half a year, the year it is put into service. Economic useful life is used for amortization rather than physical useful life. Attachment I provides a general guide for useful life.

A write down of assets occurs when reduction in future economic benefit is expected to be permanent and the value of future economic benefit is less than the TCA's net book value. A write down should not be reversed.

### **TCA INVENTORY - DISPOSAL**

Disposal procedures for capital assets are in accordance with the Board's Procurement Policy. All disposals of TCA's are recorded in the Board's financial statements in accordance with PSAB 3150. Disposal of TCA's must also be reported via the Board's 'TCA Disposal Form'.

The Public Sector Accounting Board expectations regarding transition to PSAB 3150 is provided in PSAB 3150.43 to PSAB 3150.48. PSG-7 Tangible Capital Assets of Local Governments (Attachment III), provides further guidance on the notes to the Financial Statements.

Preliminary transition steps are as follows:

- i. Remove Tangible Capital Assets and Investment in Tangible Capital Assets from the Statement of Financial Position.
- ii. Keep long term debt as a financial responsibility.
- iii. Add to the Statement of Financial Position, the recently valued, currently held, tangible capital assets along with related accumulated amortization. The offsetting account is prior year surplus.
- iv. Record new additions on the Statement of Financial Position with the offsetting entry to cash, accounts payable or long term debt. Do not expense the cost of capital assets.
- v. Record disposals at the time of replacement. Disposals reduce the cost of the asset, accumulated amortization with the residual recorded as either an expense or revenue.
- vi. Amortize the assets each year. Budget for amortization.
- vii. Write-downs are an adjustment to the costs of the TCA (PSAB 3150.31) and expense.
- viii. Offsetting adjustment for amortization in the budget for the purposes of a balanced budget is a transfer from equity.
- ix. Budgeting for capital assets will be for the costs expected on the Statement of Financial Position.

Tangible Capital Assets on the financial statements will result in net capital assets on the balance sheet and expenditures for depreciation and write-downs on the income statement.

**PRESENTATION AND DISCLOSURE**

In total and for each major category of capital assets, the Municipality will disclose the following in accordance with CICA Public Sector Guideline 7 (PSG-7):

- a. Cost at the beginning and end of the period;
- b. Additions in the period;
- c. Disposals in the period;
- d. The amount of any write-downs in the period;
- e. The amount of depreciation for the period;
- f. Accumulated amortization at the beginning and end of the period;
- g. Net carrying amount at the beginning and end of the period;

Also in accordance with PSG-7 disclosure will include:

- a. The method used to determine the cost of each major category of TCA;
- b. The amortization method used, including amortization period or rate for each major capital category of TCA;
- c. The net book value of TCA's not being amortized because they are under construction or development or have been removed from service;
- d. The nature and amount of contributed TCA's received in the period;
- e. The nature and use of tangible capital assets disclosed at nominal value;
- f. The nature of the works of art and historical treasures held by the government ;  
and
- g. The amount of interest included in the cost in the period.

**ATTACHMENT I**

**ASSET USEFUL LIFE – General Guidelines**

<u>ASSET TYPE</u>	<u>ESTIMATED USEFUL LIFE</u>
<b>Land</b>	Infinite
<b>Land Improvements</b>	15 - Infinite
Fencing	15
<b>Buildings</b>	
Medium, Large Buildings, Water Towers:	20 - 50
<i>Base Building, Water Towers</i>	50
<i>Roof, HVAC, Water Tower Foundation Upgrades</i>	20
Small Buildings (Stand along – equipment rooms):	
<i>Complete Building</i>	40
Temporary Buildings (PortaPaks, Sheds, Outbuildings):	
<i>Complete Building</i>	40
<b>Machinery &amp; Equipment</b>	
Technology and Communications	4 - 20
<i>Computer</i>	4
<i>Laptop, Projector</i>	5
<i>Television, Sound System, Monitor</i>	7
<i>Telephone System</i>	15
<i>Telephone</i>	20
<i>Network</i>	3 - 15
<i>Printer, Typewriter</i>	4 - 8
<i>Server, Scanner, UPS</i>	4 - 7
All Other Machinery & Equipment	5 - 25
<b>Vehicles (<i>Licensed Vehicles &amp; Equipment</i>)</b>	
Cars and Light Vehicles	7
Heavy Vehicles & Equipment	10
<b>Linear Assets</b>	
Watermains & associated appurtenances (useful life varies with material and location)	10-90

**APPROVAL HISTORY**

<b>APPROVED BY:</b> Union Water Supply System JBM	<b>DATE:</b> January 21, 2009
---	-------------------------------

**To:** Chair and Members of the Union Water Supply System Joint Board of Management

**From:** Rodney Bouchard, UWSS General Manager

**Date:** July 11, 2023

**Re:** Line of Credit between UWSS Joint Board of Management and UWSS Inc.

---



## **Recommendation**

It is recommended that the Union Water Supply System Joint Board of Management delegates authority to the UWSS General Manager to establish a line of credit between UWSS Inc. and the Union Water Supply System Joint Board of Management in the amount of \$2 million to allow for UWSS Inc. undertake necessary administrative and operational activities.

## **Background**

UWSS Inc. was created by its four municipal shareholders (Leamington, Kingsville, Essex and Lakeshore) as a “restructuring” of the existing Union Water Supply System Joint Board of Management (UWSS JBM). The functions and assets of the UWSS JBM are being transitioned to UWSS Inc. and the process is scheduled to be completed by December 31st, 2023.

One of the main drivers for the restructuring was to create a corporate entity that could directly access the credit market and secure debt funding independently from its municipal “owners”. The proposed UWSS capital program for 2023-2032 is in the range of \$150 million and includes major capital projects such as a new reservoir and water treatment plant. In order to fund these projects, UWSS proposes to obtain debt finance to finance the capital costs. Securement of debt financing is anticipated be completed in September or October 2023.

## **Discussion**

Although UWSS Inc. is working towards debt financing for its capital program, UWSS Inc. will be required to undertake certain administrative activities that require funds, such as opening bank accounts, establishing payroll and benefit accounts for staff, etc. UWSS Inc. will not have direct access to any funds until the Request for Finance is completed (which is anticipated to be in October 2023) and/or the UWSS JBM assets are transferred from the municipal owners to UWSS Inc (expected to be completed by November 2023). As such, UWSS Inc. proposes to establish a line of credit with the UWSS JBM in the amount of \$2million that will allow UWSS Inc. access to funds so that necessary administrative activities can be initiated until such a time as funds are directly available to UWSS Inc.

Re: UW/18/23 - Line of Credit between UWSS Inc. and UWSS JBM

---

UWSS proposes to retain the services of Willis Business Law to assist with the preparation of necessary documents to secure the line of credit with between both entities.

Respectfully submitted,



Rodney Bouchard, General Manager  
Union Water Supply System  
/kmj