HAMILTON WATER
2025 RATE SUPPORTED STAFFING SUMMARY

Section	2024 RESTATED	2025 MAINTENANCE	2025 PROGRAM CHANGES	2025 REQUESTED	2025 REQUESTED vs. 2024 RESTATED
Divisional Administration & Support	12.00	12.00	0.00	12.00	0.00
Woodward Upgrades	17.00	17.00	0.00	17.00	0.00
Customer Service & Community Outreach	59.65	59.65	0.00	59.65	0.00
Compliance & Regulations	59.00	59.00	**1.00**	60.00	1.00
Water Distribution & Wastewater Collection	105.00	105.00	0.00	105.00	0.00
Plant Operations	57.00	57.00	**1.00**	58.00	1.00
Plant Maintenance	44.00	44.00	**3.00**	47.00	3.00
Capital Planning & Delivery	39.00	39.00	**4.00**	43.00	4.00
Watershed Management	8.00	8.00	0.00	8.00	0.00
Total RATE Supported Staff	**400.65**	**400.65**	**9.00**	**409.65**	**9.00**

Rate Budget - Business Case Summary

DEPARTMENT: **Public Works**

DIVISION	SERVICE / PROGRAM	DESCRIPTION OF PROGRAM ENHANCEMENT	2025 IMPACT $ GROSS	2025 IMPACT $ NET	2025 IMPACT FTE Impact	ANNUALIZED IMPACT $ NET
Hamilton Water	Plant Operations	Senior Plant Process Engineer to provide regulatory and operational process support to engineering design teams and coordinating throughout construction for major water and wastewater plant upgrades. Note: Council Report - PW22078(a) Woodward WTP Phase	$ 128,913	$ 128,913	1.00	$ 174,099
Hamilton Water	Plant Maintenance and Technical Services	Maintenance Supervisor to provide technical and field support for mechanical, electrical, and instrumentation aspects of Water Treatment Plant Capital Projects, as well as support for the Woodward Wastewater Treatment Plant and Dundas Wastewater Treatment Plant projects. Note: Council Report - PW22078(a) Woodward WTP Phase	$ 108,978	$ 108,978	1.00	$ 146,989
Hamilton Water	Plant Maintenance and Technical Services	SCADA Project Manager to oversee and support automation and SCADA tasks throughout the design, construction, training, and commissioning phases of Water Treatment Plant Capital Projects, as well as the Woodward Wastewater Treatment Plant and Dundas Wastewater Treatment Plant. Note: Council Report - PW22078(a) Woodward WTP Phase	$ 95,815	$ 95,815	1.00	$ 129,563
Hamilton Water	Lab Services	Lab Technician I to provide full-time support in metals and organics analysis to handle the increased sample load and reduce reliance on students and overtime.	$ 89,264	$ 89,264	1.00	$ 120,890
Hamilton Water	Plant Maintenance and Technical Services	SCADA Cybersecurity Project Manager to focus on enhancing cybersecurity measures, performing risk assessments, and managing incident responses to protect critical infrastructure, following a recent cyber incident at the City of Hamilton.	$ 95,710	$ 95,710	1.00	$ 129,422
Hamilton Water	Capital Delivery	Asset Management Technologist will enhance Hamilton Water's vertical asset management program by advancing database content, refining reporting capabilities, supporting field inspections, and implementing new procedures to improve asset data quality, risk assessments, and capital planning.	$ 84,642	$ -	1.00	$ -
Hamilton Water	Systems Planning	Project Manager to support the development and maintenance of real-time water, wastewater, and stormwater models to manage capacity, facilitate growth and intensification, improve regulatory compliance, and reduce reliance on external consultants.	$ 96,475	$ 57,885	1.00	$ 87,161
Hamilton Water	Systems Planning	Technologist to manage hydrometric and system-wide monitoring data to support real-time water, wastewater, and stormwater models, facilitating growth, intensification, and regulatory compliance while reducing reliance on external consultants.	$ 75,708	$ 45,425	1.00	$ 68,870
Hamilton Water	Systems Planning	Senior Project Manager to assist with the implementation of the LRT Project.	$ 167,339	$ -	1.00	$ -
Division Subtotal			**$ 942,842**	**$ 621,989**	**9.00**	**$ 856,993**
DEPARTMENT TOTAL			**$ 942,842**	**$ 621,989**	**9.00**	**$ 856,993**

CITY OF HAMILTON
2025 RATES OPERATING BUDGET
BUSINESS CASE FORM #1

BUSINESS CASE OVERVIEW	
Request Title	Senior Plant Process Engineer
Department/Division	Public Works - Hamilton Water
Request Driver	Service Level Enhancement
Funding Source	Rate Budget
Proposed Start Date	1-Jan-25
Strategic Plan Priorities	Economic Prosperity & Growth, Built Environment & Infrastructure, Our People & Performance

FINANCIAL IMPACT 2025 OPERATING BUDGET		$'000
DESCRIPTION	2025 AMOUNT	ANNUALIZED AMOUNT
Total Expenditures	$174.1	$174.1
Total Revenue	$0.0	$0.0
Net Levy	**$174.1**	**$174.1**
Full Time Equivalent (FTE)	**1.00**	**1.00**
	2025 Associated Capital Funding	**Total Associated Capital Funding**
Capital Budget Impact	$0.0	$0.0

BUSINESS CASE DETAILS

1. Reason for Request:

Council Report PW22078(a) (Woodward Water Treatment Plant Phase 2 Upgrades) identified the operational staffing needs required to deliver the large capital projects scheduled to occur over the next 10-15 years as noted below. The projects total more than $1,000,000,000 in expenditures.

(c)That three permanent Full-Time Equivalents be included in the recommended 2025 Water, Wastewater and Stormwater Rate Budget to provide operational support for the Woodward Water Treatment Plant Phase 2 Upgrades and other large capital upgrades occurring at the City's two wastewater treatment facilities.

Currently operational input into the design of large capital projects at the Water and Wastewater Treatment Plants is provided by the Manager of Plant Operations and the Overall Responsible Operator (ORO) for the Water Treatment system and the ORO for the Wastewater Treatment systems. Given that the Water Treatment Plant Phase 2 project is planned to occur simultaneously with the Woodward Wastewater Treatment Plant Phase 2 Expansion project and the Dundas Wastewater Treatment Plant replacement project, the current structure for operational input will create significant project risks. The Senior Plant Process Engineer will provide regulatory and process operational requirements to the engineering design teams and provide coordination throughout the construction period for these projects.

2. Implications if Request not permitted:

Should this FTE request not be granted, operational and facility specific input into the design of the projects will not occur in a timely manner or with any attention to detail and will lead to project delays during design and potential errors or omissions. The result would be increased design and construction costs and an end product that doesn't meet the intended goals and is operationally complex, inefficient and difficult for frontline staff.

The other potential risk is a lack of operational oversight of the existing facilities and staff during the design phase which could lead to Labour Relation issues and/or compliance issues due to water quality.

3. Alternatives (if any):

An alternative model would be to maintain the status quo and manage the expectations of the Capital Delivery and Woodward Upgrades Team Delays in reviews and participation in meetings may occur.

4. Performance Measures:

Performance Measures would include participation in capital project meetings. Review of drawings and project documentation and operational support

COUNCIL PRIORITIES	
Priority	Sustainable Economic & Ecological Development
Outcome	Accelerate our response to climate change
Measure of Success	Assessment of infrastructure projects against their impact on the City's climate resilience and readiness

CITY OF HAMILTON
2025 RATES OPERATING BUDGET
BUSINESS CASE #2

BUSINESS CASE OVERVIEW	
Request Title	Maintenance Supervisor
Department/Division	Public Works - Hamilton Water
Request Driver	Service Level Enhancement
Funding Source	Rate Budget
Proposed Start Date	1-Jan-25
Strategic Plan Priorities	Economic Prosperity & Growth, Built Environment & Infrastructure, Our People & Performance

FINANCIAL IMPACT 2025 OPERATING BUDGET	$'000	
DESCRIPTION	2025 AMOUNT	ANNUALIZED AMOUNT
Total Expenditures	$146.9	$146.9
Total Revenue	$0.0	$0.0
Net Levy	**$146.9**	**$146.9**
Full Time Equivalent (FTE)	**1.00**	**1.00**
	2025 Associated Capital Funding	**Total Associated Capital Funding**
Capital Budget Impact	$0.0	$0.0

BUSINESS CASE DETAILS

1. Reason for Request:

There is currently no dedicated maintenance support for assisting Water Treatment Plant Capital Projects. The Maintenance Supervisor will offer technical and field support in mechanical, electrical, instrumentation aspects throughout the project lifecycle. This role will serve as the primary representative of Plant Maintenance throughout the design, construction, training, commissioning, and warranty phases. This position will also support the Woodward Wastewater Treatment Plant Phase 2 Expansion project and the Dundas Wastewater Treatment Plant replacement project. This position was identified in the Woodward Water Treatment Plant Phase 2 Upgrades Report [PW22078(a)] to Public Works Committee.

2. Implications if Request not permitted:

If the request for an additional Maintenance Supervisor is not approved, several significant impacts will arise. Currently, the workload of the Maintenance Supervisors is already at full capacity. Without additional support, they will be unable to adequately manage the demands of the upcoming Capital Projects. Their time and resources will be stretched thin as they continue to provide essential field support to their teams, oversee major maintenance projects, and handle their daily administrative duties. This strain could lead to decreased efficiency and effectiveness in both routine operations and special projects. Consequently, there may be delays in project completion, increased risk of errors, and potential safety hazards due to insufficient oversight and support. The overall quality of maintenance services could suffer, impacting not only the teams but also the broader operational needs of the Plant.

3. Alternatives (if any):

An alternative model would be to maintain the status quo and manage the expectations of the Capital Delivery and Woodward Upgrades Team Delays in reviews and participation in meetings may occur.. Major maintenance work that is overseen by the Supervisors can be scaled back and there would be less field support to frontline staff if Supervisors are required to provide support to the Capital Projects.

4. Performance Measures:

Performance Measures would include participation in capital project meetings. Review of drawings and project documentation and coordination of maintenance staff to provide support.

COUNCIL PRIORITIES	
Priority	Responsiveness and Transparency
Outcome	Build a high performing public service
Measure of Success	Increased participation and performance through the Employee Engagement Index

CITY OF HAMILTON
2025 RATES OPERATING BUDGET
BUSINESS CASE #3

BUSINESS CASE OVERVIEW	
Request Title	Project Manager - SCADA
Department/Division	Public Works - Hamilton Water
Request Driver	Service Level Enhancement
Funding Source	Rate Budget
Proposed Start Date	1-Jan-25
Strategic Plan Priorities	Economic Prosperity & Growth, Built Environment & Infrastructure, Our People & Performance

FINANCIAL IMPACT 2025 OPERATING BUDGET	$'000	
DESCRIPTION	2025 AMOUNT	ANNUALIZED AMOUNT
Total Expenditures	$129.6	$129.6
Total Revenue	$0.0	$0.0
Net Levy	**$129.6**	**$129.6**
Full Time Equivalent (FTE)	**1.00**	**1.00**
	2025 Associated Capital Funding	**Total Associated Capital Funding**
Capital Budget Impact	$0.0	$0.0

BUSINESS CASE DETAILS

1. Reason for Request:

There is currently no dedicated SCADA Project Manager for assisting Water Treatment Plant Capital Projects. The SCADA Project Manager will play a crucial role in overseeing and supporting automation and SCADA-related tasks throughout the lifecycle of the project, including design, construction, training, and commissioning phases. This position will also support the Woodward Wastewater Treatment Plant Phase 2 Expansion project and the Dundas Wastewater Treatment Plant replacement project.

2. Implications if Request not permitted:

If the request for an additional SCADA Project Manager is not approved, several significant impacts will arise. The current SCADA Project Manager is already operating at full capacity. Without additional support, they will be unable to adequately handle the upcoming Capital Projects while also fulfilling the core duties of their position. This may lead to delays that could disrupt the project schedule. Additionally, with only one SCADA Project Manager, any extended absence could severely impact project progress and continuity. The lack of redundancy poses a significant risk to the successful and timely completion of ongoing and future projects.

3. Alternatives (if any):

An alternative model would be to maintain the status quo and manage the expectations of the Capital Delivery and Woodward Upgrades Team Delays in reviews and participation in meetings may occur..

4. Performance Measures:

Performance Measures would include participation in capital project meetings. Review of drawings and project documentation and SCADA support

COUNCIL PRIORITIES	
Priority	Responsiveness and Transparency
Outcome	Modernize City Systems
Measure of Success	Implementation of the City's Digital Strategy to enhance customer-centred service design

CITY OF HAMILTON

2025 RATES OPERATING BUDGET

BUSINESS CASE FORM #4

BUSINESS CASE OVERVIEW	
Request Title	Lab Technician I
Department/Division	Public Works - Hamilton Water
Request Driver	Service Level Enhancement
Funding Source	Water, Wastewater and Stormwater Rate Budget
Proposed Start Date	1-Apr-25
Strategic Plan Priorities	Health & Safe Communities

FINANCIAL IMPACT 2025 OPERATING BUDGET		$'000
DESCRIPTION	2025 AMOUNT	ANNUALIZED AMOUNT
Total Expenditures	$89.3	$120.9
Total Revenue	$0.0	$0.0
Net Levy	**$89.3**	**$120.9**
Full Time Equivalent (FTE)	**1.00**	**1.00**
	2025 Associated Capital Funding	**Total Associated Capital Funding**
Capital Budget Impact	$0.0	$0.0

BUSINESS CASE DETAILS

1. Reason for Request:

Since 2018, the City of Hamilton Environmental Laboratory's sample load has increased by 30% including a consistent increase in samples with a complex matrix requiring labour intensive analysis and additional investigation. A Lab Technician I is now required to be allocated to both the metals and the organics analysis on a full-time basis. This increase in samples has been resourced with a temporary (over complement) student and the use of overtime. Greater value can be achieved by adding the requested Lab Technician 1 position.

2. Implications if Request not permitted:

Temporary (over complement) student resource will need to be extended or made permanent and the reliance on overtime will continue.

3. Alternatives (if any):

Additional samples could be sent for analysis to contracted external laboratories, but this would increase costs significantly. Alternatively, the status quo could be maintained (use of student resources and overtime), but this is also more costly than adding the recommended position.

4. Performance Measures:

Elimination of a temporary (over complement) student position. Reduced overtime costs and increased bench strength within the Lab.

COUNCIL PRIORITIES	
Priority	Sustainable Economic & Ecological Development
Outcome	Protect green space and waterways

Measure of Success	Acceleration of the City's Water Strategy and delisting of Hamilton Harbour as an International Joint Commission area of Concern

CITY OF HAMILTON
2025 RATES OPERATING BUDGET
BUSINESS CASE FORM #5

BUSINESS CASE OVERVIEW	
Request Title	Project Manager - SCADA Cybersecurity
Department/Division	Public Works - Hamilton Water
Request Driver	Service Level Enhancement
Funding Source	Water, Wastewater and Stormwater Rate Budget
Proposed Start Date	1-Apr-25
Strategic Plan Priorities	Economic Prosperity & Growth, Built Environment & Infrastructure, Our People & Performance

FINANCIAL IMPACT 2025 OPERATING BUDGET		$'000
DESCRIPTION	2025 AMOUNT	ANNUALIZED AMOUNT
Total Expenditures	$95.7	$129.4
Total Revenue	$0.0	$0.0
Net Levy	**$95.7**	**$129.4**
Full Time Equivalent (FTE)	**1.00**	**1.00**
	2025 Associated Capital Funding	**Total Associated Capital Funding**
Capital Budget Impact	$0.0	$0.0

BUSINESS CASE DETAILS

1. Reason for Request:

The Hamilton Water Division is requesting approval for an additional Project Manager specializing in SCADA Cybersecurity. This resource has been identified as critical in light of the 2024 cyberattack on the City of Hamilton, which highlighted the vulnerability of industrial control systems to sophisticated cyber threats. This role is essential to protect the City's critical infrastructure from similar attacks, ensuring the security and integrity of water, wastewater and stormwater operations. A dedicated SCADA Cybersecurity Project Manager will focus on implementing advanced cybersecurity measures, performing comprehensive risk assessments, and managing incident responses to mitigate potential threats. This addition will increase the number of staff responsible for daily oversight of cybersecurity responsibilities to two, ensuring that systems are fortified against cyber risks. By investing in this specialized role, the City can enhance resilience, maintain regulatory compliance, and reassure the community of its commitment to delivering secure, reliable water, wastewater and stormwater services.

2. Implications if Request not permitted:

If the request to hire an additional Project Manager specializing in SCADA Cybersecurity is denied, Hamilton Water may face significant risks and operational vulnerabilities. Without this dedicated expertise, the current SCADA team could easily become overburdened, leading to potential gaps in cybersecurity coverage and slower response times to emerging threats. There would be increased risk for system breaches similar to the recent cyberattack on the City of Hamilton, potentially causing operational disruptions, financial losses, and reputational damage.

3. Alternatives (if any):

Retain external consultants / contractors. Not a cost-effective solution and requires PM resources to manage the contracts anyway.

4. Performance Measures:

Performance measurements would include

Incident Response Time: Average time taken to detect, respond to, and mitigate cyber threats and security incidents.

Risk Assessment Frequency: Number and thoroughness of risk assessments conducted within specified timeframes.

Training and Awareness Programs: Frequency and effectiveness of cybersecurity training and awareness programs for staff.

Vulnerability Patch Management: Efficiency in identifying and applying security patches and updates to SCADA systems.
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COUNCIL PRIORITIES

Priority	Responsiveness and Transparency
Outcome	Modernize City Systems
Measure of Success	Streamlined processes and accelerated approvals for City services

CITY OF HAMILTON

2025 RATES OPERATING BUDGET

BUSINESS CASE FORM #6

BUSINESS CASE OVERVIEW	
Request Title	Asset Management Technologist
Department/Division	Public Works - Hamilton Water
Request Driver	Service Level Enhancement
Funding Source	Water, Wastewater and Stormwater Rate Budget
Proposed Start Date	1-Apr-25
Strategic Plan Priorities	Health & Safe Communities, Clean & Green, Built Environment & Infrastructure

FINANCIAL IMPACT 2025 OPERATING BUDGET		$'000
DESCRIPTION	2025 AMOUNT	ANNUALIZED AMOUNT
Total Expenditures	$84.6	$114.8
Total Revenue	$84.6	$114.8
Net Levy	**$0**	**$0**
Full Time Equivalent (FTE)	**1.00**	**1.00**
	2025 Associated Capital Funding	**Total Associated Capital Funding**
Capital Budget Impact	$84.6	$114.8

BUSINESS CASE DETAILS

1. Reason for Request:

The Hamilton Water Division's objectives include improving its vertical asset management program. To support an improved and sustainable system an implementation schedule has been created which outlines required tasks. In 2024, the Water/Wastewater/Stormwater vertical asset management program will have improved structure in terms of operating procedure development, database development and the population of the data with historic asset information, which all align with the City's Corporate Asset Management plan. These actions are required to meet O.Reg.588/17.

 What are the objectives of the request? - To perform the work to fill the gaps that were identified through the implementation plan. The implementation plan identified tasks that are currently not being completed but are required to support improvements to the program.
 What are the expected outcomes of the request? - A new Technologist Infrastructure Management will further advance database content, refine reporting capabilities, support field inspections and assist in implementing new procedures. The Technologist will also assist with balancing the condition assessment program. This will improve the program and provide more valuable information that supports capital investment in assets.
 What are the actions that will create these expected outcomes? - The new Technologist Infrastructure Management will assist in achieving the expected outcomes by supporting the data requirements of the assessment process, risk process, asset lifecycle analysis, valuation process for assets and tracking of recommendations from reports.
 What is the challenge or opportunity that this request proposes to solve? - The quality of asset data that is currently utilized is at a low confidence level in many areas. Supporting the implementation schedule with an additional resource will improve the quality and confidence of this data.
 What value will the City gain from this request? - The requested Technologist position will assist in improving and organizing the information that will increase confidence in forecasting and planning future capital projects. The result will assist in maximizing capital investments to better meet service level requirements and maintain acceptable risk level.
 Does the request provide value for money (efficiency and effectiveness) to a program or service? - Improved ability to deliver the vertical asset management program with more confidence which will allow for better alignment of capital investments to the vertical infrastructure that carries the largest risk.

2. Implications if Request not permitted:

Not having this position will delay the implementation plan that was initiated in 2021 and is required to ensure a functional vertical asset management program into the future.

 What impacts will this request have on the community or organization, in terms of service delivery, legal or policy requirements, daily operations or customer service? - This position will supporting the requirements outlined in O.Reg 588/17, and create more reliable assets to provide drinking water, wastewater and stormwater services to the public.

 What will be the risk, impact or consequence if the request is not approved? - If the technologist position is not approved, the vertical asset management program will continue to be under-resourced, resulting in delays to the implementation plan. Certain aspects of this program will be not be supported. Not having this support results in more uncertainty and there will continue to be risk for capital investments to be directed to vertical infrastructure that does not carry the highest risk. As a result, other assets that carry a higher risk have the potential to fail unexpectedly and require a larger investment on an emergency basis.

3. Alternatives (if any):

Alternatives would include increased the need for outside consultant services to assist with database structure development and monitoring, along with condition assessment reporting assistance, site inspections, and data entry. This work will be continual and therefore there would be a high likelihood different consultant would need to rotate through this work to ensure compliance with purchasing policies. Using outside consultants will also delay the implementation of the asset management program. This creates repeated delays resulting from learning curves when consultants turn over, and a high internal demand on consultant supervision to ensure consistency. Additionally this would drive asset expertise and understanding outside Hamilton Water which is not a desirable outcome.

4. Performance Measures:

Performance Measures will be based on the following:

 I**s there baseline data available? If not, what about other municipal benchmarks**? - The asset management program has documented baseline data and responsibilities for this position.

 What target(s) in relation to a baseline demonstrate progress in achieving the expected outcome(s) of the request? - Established targets and outcomes include meeting the implementation Plan schedule established in 2021. The performance will be measured on the 5 year implementation timelines established. Additionally, the establishment of asset reports used to prioritize Capital Projects, reports on asset KPIs determined in concert with the Corporate Asset Management office, and asset management news letters will show progress against baseline.

 How will the performance of this request be measured and evaluated? - The performance of the Technologist will be measured on gathering level 1 assessment data, using the EAM system to generate and update asset attribute data, integrating level 2 asset management data into EAM, and entering and managing risk data for vertical assets

COUNCIL PRIORITIES	
Priority	Sustainable Economic & Ecological Development
Outcome	Accelerate our response to climate change
Measure of Success	Assessment of infrastructure projects against their impact on the City's climate resilience and readiness

CITY OF HAMILTON

2025 RATES OPERATING BUDGET

BUSINESS CASE FORM #7

BUSINESS CASE OVERVIEW	
Request Title	Project Manager - Modelling
Department/Division	Public Works - Hamilton Water
Request Driver	Service Level Enhancement
Funding Source	Rate Budget
Proposed Start Date	1-May-25
Strategic Plan Priorities	Economic Prosperity & Growth, Health & Safe Communities, Clean & Green, Built Environment & Infrastructure, Our People & Performance

FINANCIAL IMPACT 2025 OPERATING BUDGET		$'000
DESCRIPTION	2025 AMOUNT	ANNUALIZED AMOUNT
Total Expenditures	$96.5	$145.3
Total Revenue	$38.6	$58.1
Net Levy	**$57.9**	**$87.2**
Full Time Equivalent (FTE)	**1.00**	**1.00**
	2025 Associated Capital Funding	**Total Associated Capital Funding**
Capital Budget Impact	$38.6	$58.1

BUSINESS CASE DETAILS

1. Reason for Request:

The Hamilton Water Division is requesting one new permanent full-time Project Manager to contribute to the development of real time water, wastewater, and stormwater models for the City of Hamilton. This work is necessary to support growth and intensification across the City.

Capacity constraints within the municipal water distribution and wastewater collection systems are identified daily through the review of Development Applications that propose growth and intensification at a rate even greater than the City forecasted for the 2051 horizon year. As the rate of intensification increases, Hamilton Water is finding more and more developments competing for system capacity within the same water, wastewater, and stormwater system networks. There currently is no City Wide capacity allocation tracking, or development tracking as it relates to residual capacity within municipal systems. To further exacerbate capacity concerns, Provincial Bill 23 allows for some forms of developments to proceed without being subject to the Planning process, and without Hamilton Water visibility or oversight.

Presently, for every Application submitted where there is a known or potential constraint within the municipal water, wastewater and stormwater systems, a condition of zoning approval is placed requiring Proponents to demonstrate that there is adequate capacity within the systems to service the proposed growth. This is a reactive approach to identifying and prioritizing capital infrastructure needs to facilitate development, and results in the delay of planned infrastructure projects. Further, the added burden on Proponents to complete the hydraulic assessments has become an issue of contention as it causes delays in approvals, is time consuming for both the Proponent and City staff, and costly since they are required to account for all approved and in-progress developments within the area in question. The result is a greater number of Applications being moved to the Ontario Land Tribunal (OLT) for legal proceedings.

Hydraulic modelling is also the primary tool in the City's regulatory reporting process for combined sewer overflows. The Ministry of the Environment, Conservation, and Parks has vocalized concerns related to the reliability of the City's current hydraulic models. Through conditions of the Consolidate Linear Infrastructure Environmental Compliance Approval (CLI ECA), the City will be required to update our hydraulic model within four years, and enable near real time reporting of combined sewer overflows.

Hamilton Water is recommending continued investment in the City's hydraulic modeling office to support the SPM Modelling in the development and maintenance of real-time hydraulic models for water, wastewater, and stormwater. The Modelling Unit will be an integral piece of Development Application reviews for both Hamilton Water and Development Engineering, as they will be able to provide an immediate review and response on the availability of capacity within our municipal systems to service proposed development. This Unit will also work with the Master Plan Team to inform future Development Charge Background Studies, assist in the prioritization of sewer separation strategies to create wastewater system capacity and allow for intensification within those areas of the City. This Unit is expected to result in significant cost savings in consulting fees over the long term as all of Hamilton's current modelling is presently outsourced to consultants.

2. Implications if Request not permitted:

This request is not only aligned with Hamilton Water's service level agreement with the Planning and Economic Development Department, but aligns with the Staff mandates, Council priorities, and Provincial directions. The implications of this request not being approved are at a minimum:

- The inability to meet the required service level so support capital project scope development due to prioritization of development enabling projects
- Increased backlog of water, wastewater and stormwater system planning projects which will delay project handovers to capital teams
- Duplication of effort since there are multiple Applicants being asked to complete the same task, at times with conflicting results
- Increase in Consulting assignments/costs for Hamilton Water to retain consultants to undertake scoped hydraulic modelling assignments on an Application by Application basis
- Rejection of development applications and inability to support approvals
- Increased number of OLT hearings for Staff

3. Alternatives (if any):

1. External resources (Consultant): Cost prohibitive; not practical as a PM is still required to manage the Consultant.

4. Performance Measures:

Hamilton Water presently maintains and tracks KPIs for Development Application reviews and responses. They will be updated accordingly with revised timelines, and success will be measured by those KPIs being consistently met.

A quantitative review and compiling of the water, wastewater and stormwater planning backlog will be undertaken, differentiating between growth & development related vs. capital improvement projects. Success will be measured by maintaining or increasing the % of approved capital budget spent, and # of Charters outstanding in both of these categories.

Compliance with the conditions of the CLI ECA.

COUNCIL PRIORITIES	
Priority	Sustainable Economic & Ecological Development
Outcome	Protect green space and waterways
Measure of Success	Acceleration of the City’s Water Strategy and delisting of Hamilton Harbour as an International Joint Commission area of Concern

CITY OF HAMILTON

2025 RATES OPERATING BUDGET

BUSINESS CASE FORM #8

BUSINESS CASE OVERVIEW	
Request Title	Technologist, Modelling
Department/Division	Public Works - Hamilton Water
Request Driver	Service Level Enhancement
Funding Source	Water, Wastewater and Stormwater Rate Budget
Proposed Start Date	1-May-25
Strategic Plan Priorities	Economic Prosperity & Growth, Health & Safe Communities, Clean & Green, Built Environment & Infrastructure, Our People & Performance

FINANCIAL IMPACT 2025 OPERATING BUDGET	$'000	
DESCRIPTION	2025 AMOUNT	ANNUALIZED AMOUNT
Total Expenditures	$75.7	$114.8
Total Revenue	$30.3	$45.9
Net Levy	**$45.4**	**$68.9**
Full Time Equivalent (FTE)	**1.00**	**1.00**
	2025 Associated Capital Funding	**Total Associated Capital Funding**
Capital Budget Impact	$30.3	$45.9

BUSINESS CASE DETAILS

1. Reason for Request:

The Hamilton Water Division is requesting one new permanent full-time Technologist to contribute to the development of real time water, wastewater, and stormwater models for the City of Hamilton. This work is necessary to support growth and intensification across the City.

Capacity constraints within the municipal water distribution and wastewater collection systems are identified daily through the review of Development Applications that propose growth and intensification at a rate even greater than the City forecasted for the 2051 horizon year. As the rate of intensification increases, Hamilton Water is finding more and more developments competing for system capacity within the same water, wastewater, and stormwater system networks. There currently is no City Wide capacity allocation tracking, or development tracking as it relates to residual capacity within municipal systems. To further exacerbate capacity concerns, Provincial Bill 23 allows for some forms of developments to proceed without being subject to the Planning process, and without Hamilton Water visibility or oversight.

Presently, for every Application submitted where there is a known or potential constraint within the municipal water, wastewater and stormwater systems, a condition of zoning approval is placed requiring Proponents to demonstrate that there is adequate capacity within the systems to service the proposed growth. This is a reactive approach to identifying and prioritizing capital infrastructure needs to facilitate development, and results in the delay of planned infrastructure projects. Further, the added burden on Proponents to complete the hydraulic assessments has become an issue of contention as it causes delays in approvals, is time consuming for both the Proponent and City staff, and costly since they are required to account for all approved and in-progress developments within the area in question. The result is a greater number of Applications being moved to the Ontario Land Tribunal (OLT) for legal proceedings.

Hydraulic modelling is also the primary tool in the City's regulatory reporting process for combined sewer overflows. The Ministry of the Environment, Conservation, and Parks has vocalized concerns related to the reliability of the City's current hydraulic models. Through conditions of the Consolidate Linear Infrastructure Environmental Compliance Approval (CLI ECA), the City will be required to update our hydraulic model within four years, and enable near real time reporting of combined sewer overflows.

Hamilton Water is recommending continued investment in the City's hydraulic modeling office to support the SPM Modelling in the development and maintenance of real-time hydraulic models for water, wastewater, and stormwater. The Modelling Unit will be an integral piece of Development Application reviews for both Hamilton Water and Development Engineering, as they will be able to provide an immediate review and response on the availability of capacity within our municipal systems to service proposed development. This Unit will also work with the Master Plan Team to inform future Development Charge Background Studies, assist in the prioritization of sewer separation strategies to create wastewater system capacity and allow for intensification within those areas of the City. This Unit is expected to result in significant cost savings in consulting fees over the long term as all of Hamilton's current modelling is presently outsourced to consultants.

2. Implications if Request not permitted:

This request is not only aligned with Hamilton Water's service level agreement with the Planning and Economic Development Department, but aligns with the Staff mandates, Council priorities, and Provincial directions. The implications of this request not being approved are at a minimum:

- The inability to meet the required service level so support capital project scope development due to prioritization of development enabling projects
- Increased backlog of water, wastewater and stormwater system planning projects which will delay project handovers to capital teams
- Duplication of effort since there are multiple Applicants being asked to complete the same task, at times with conflicting results
- Increase in Consulting assignments/costs for Hamilton Water to retain consultants to undertake scoped hydraulic modelling assignments on an Application by Application basis
- Rejection of development applications and inability to support approvals
- Increased number of OLT hearings for Staff

3. Alternatives (if any):

1. External resources (Consultant): Cost prohibitive; not practical as a PM is still required to manage the Consultant.

4. Performance Measures:

Hamilton Water presently maintains and tracks KPIs for Development Application reviews and responses. They will be updated accordingly with revised timelines, and success will be measured by those KPIs being consistently met.

A quantitative review and compiling of the water, wastewater and stormwater planning backlog will be undertaken, differentiating between growth & development related vs. capital improvement projects. Success will be measured by maintaining or increasing the % of approved capital budget spent, and # of Charters outstanding in both of these categories.

Compliance with the conditions of the CLI ECA.

COUNCIL PRIORITIES

Priority	Sustainable Economic & Ecological Development
Outcome	Protect green space and waterways
Measure of Success	Acceleration of the City's Water Strategy and delisting of Hamilton Harbour as an International Joint Commission area of Concern