

Woodward Water Treatment Plant Capital Program - Business Case Summary

Department: Public Works

Capital Delivery Staff	Description of Program Enhancement	Total Expenditure	Net	FTE Impact	Annualized Amount
Manager	Oversee the capital delivery of Phase 2A and 2B WTP upgrades, other active/future capital projects, program and staffing management.	\$ 46,250	\$ -	1	\$ 185,000
Senior Project Manager	Provide project management for the capital delivery services for the Filter Building components within the Phase 2A and 2B upgrades and other active and future capital projects at the plant. Duties will also include supervisory role for both Project Manager and Engineering Technologist.	\$ 42,250	\$ -	1	\$ 169,000
Project Manager	Provide project management for the capital delivery services for the Chlorine Building components within the WTP Phase 2A and 2B upgrades and other active and future capital projects at the Water Treatment Plant.	\$ 39,250	\$ -	1	\$ 157,000
Engineering Technologist	Address multiple day-to-day requests received and provide project/program support, maintain a document management system and provide project controls for the various capital projects.	\$ 27,750	\$ -	1	\$ 111,000
<b>TOTAL</b>		<b>\$ 155,500</b>		<b>4</b>	<b>\$ 622,000</b>

**CITY OF HAMILTON**  
**Woodward Water Treatment Plant Capital Program**  
**BUSINESS CASE #1**

**BUSINESS CASE OVERVIEW**

<b>Request Title</b>	Manager, Capital Delivery, Woodward Water Treatment Plant Program	
<b>Department/Division</b>	Public Works - Hamilton Water - Capital Delivery	
<b>Request Driver</b>	Woodward Water Treatment Plant Phase 2 Capital Program	
<b>Funding Source</b>	Project ID No. 5142166110 and 5143066110	
<b>Proposed Start Date</b>	Q4 2024	
<b>Strategic Plan Priorities</b>	Built Environment & Infrastructure	y
<b>Do you Require the Use of External Consultants?</b>	no	

**2024 OPERATING BUDGET FINANCIAL IMPACTS**

DESCRIPTION	2024 AMOUNT	ANNUALIZED AMOUNT
Salary/Wages	\$37,500	\$150,000
Benefits	\$8,750	\$35,000
<b>Total Expenditures</b>	<b>\$46,250</b>	<b>\$185,000</b>
Capital Funding	\$46,250	\$185,000
<b>Total Revenue</b>	<b>\$46,250</b>	<b>\$185,000</b>
<b>Net Impact</b>	<b>\$0</b>	<b>\$0</b>
<b>Full Time Equivalent (FTE)</b>	<b>1.0</b>	<b>1.0</b>
<b>Capital Budget Impact</b>	<b>\$46,250</b>	<b>\$185,000</b>

**BUSINESS CASE DETAILS**

**1. Reason for Request:**

There is currently no dedicated Manager resource for the management of the Water Treatment Plant large capital program. The responsibilities of the Manager will be to oversee the overall project management of the Phase 2A and 2B Water Treatment Plant upgrades along with the overall Capital Program and staffing management. The Manager will also be responsible for the sponsorship oversight for the Senior Project Manager led capital projects within the Water Treatment Plant Capital Program.

- **What are the objectives of the request?** The recommended resource structure for the Water Treatment Plant Phase 2 Upgrade for the staffing request will provide a dedicated Capital staff.
- **What are the expected outcomes of the request and the actions that will create these expected outcomes?** - A new Manager will provide a dedicated focus on further advancing this large capital project into the next phase of the project, including issuing the RFP for engineering design and contract administration service.
- **What is the challenge or opportunity that this request proposes to solve?** The staffing recommendations will ensure that Hamilton Water has the required staff resources to successfully design, construct, and commission an extremely complex capital rehabilitation and upgrade program at the City's most critical water facility.
- **What value will the City gain from this request?** The recommendations in Report PW22078(a) will ensure that Hamilton Water has the required staff resources to successfully design, construct, and commission an extremely complex capital rehabilitation and upgrade program at the City's most critical water facility.
- **Does the request provide value for money (efficiency and effectiveness) to a program or service?** There is ample evidence across municipalities that capital projects and programs with higher levels of staff turn-over result in projects that experience delays, increased overall project costs, and increased operational risk.

**2. Implications if Request not permitted:**

Not having this dedicated position will significantly increase risks including schedule and variances for the program, which has project timelines that are estimated to carry through to 2035 for the construction of both WTP Phases 2A & 2B.

- **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?** Increased risk of infrastructure failure is accompanied by increased risk of regulatory non-compliance, fines, and exposes the City to significant liability. Mayor and Council, and senior members of City staff may also be exposed to personal liability under the Standard of Care Provisions within the Ontario Safe Drinking Water Act.
- **What will be the risk, impact or consequence if the request is not approved?** if this request is not permitted, it would impact the existing water, wastewater and stormwater capital program resulting in increased risk of infrastructure failures, loss of water, wastewater or stormwater services, adverse public health impacts, adverse environmental impacts, and requiring expensive and unplanned emergency interventions.

**3. Alternatives (if any):**

Alternative 1: Staff could be directed to resource the Water Treatment Plant Phase 2 Capital Program by re-allocating existing Hamilton Water capital program staff. This alternative is not recommended because it would impact the existing water, wastewater and stormwater capital program resulting in increased risk of infrastructure failures, loss of water, wastewater or stormwater services, adverse public health impacts, adverse environmental impacts, and requiring expensive and unplanned emergency interventions.

Alternative 2: the new position could be approved on a temporary basis expiring at the end of the Water Treatment Plant Phase 2 Capital Program. This alternative is not recommended because it adds significant risk to the capital program resulting from increased staff turn-over. The Water Treatment Plant Phase 2 Capital Program represents a \$543M investment in the City's most critical water asset, with an accompanying 10-year program schedule. There is ample evidence across municipalities that capital projects and programs with higher levels of staff turn-over result in projects that experience delays, increased overall project costs, and increased operational risk.

**4. Performance Measures:**

Performance Measures will be based on the following:

- **Is there baseline data available?** KPI targets for monitoring cashflows, schedules and budgets are currently in place.
- **What target(s) in relation to a baseline demonstrate progress in achieving the expected outcome(s) of the request?** Established KPI targets and outcomes include meeting the estimated project schedule and budget established in 2024 rate budget process. The performance will be measured, tracked and updated on a monthly basis.
- **How will the performance of this request be measured and evaluated?** The performance of the Manager will be measured on the overall success of the Water Treatment Plant Capital program KPI target expectations, along with successful management of the staffing complement.

**CITY OF HAMILTON**  
**Woodward Water Treatment Plant Capital Program**  
**BUSINESS CASE #2**

**BUSINESS CASE OVERVIEW**

<b>Request Title</b>	Senior Project Manager, Capital Delivery, Woodward Water Treatment Plant Program	
<b>Department/Division</b>	Public Works - Hamilton Water - Capital Delivery	
<b>Request Driver</b>	Woodward Water Treatment Plant Phase 2 Capital Program	
<b>Funding Source</b>	Project ID No. 5142166110 and 5143066110	
<b>Proposed Start Date</b>	Q4 2024	
<b>Strategic Plan Priorities</b>	Built Environment & Infrastructure	y
<b>Do you Require the Use of External Consultants?</b>	no	

**2024 OPERATING BUDGET FINANCIAL IMPACTS**

DESCRIPTION	2024 AMOUNT	ANNUALIZED AMOUNT
Salary/Wages	<b>\$34,100</b>	<b>\$136,400</b>
Benefits	<b>\$8,150</b>	<b>\$32,600</b>
Add item here		
<b>Total Expenditures</b>	<b>\$42,250</b>	<b>\$169,000</b>
Capital Funding	<b>\$42,250</b>	<b>\$169,000</b>
<b>Total Revenue</b>	<b>\$42,250</b>	<b>\$169,000</b>
<b>Net Impact</b>	<b>\$0</b>	<b>\$0</b>
<b>Full Time Equivalent (FTE)</b>	<b>1.0</b>	<b>1.0</b>
<b>Capital Budget Impact</b>	<b>\$42,250</b>	<b>\$169,000</b>

**BUSINESS CASE DETAILS**

**1. Reason for Request:**

There is currently no dedicated Senior Project Manager resource for the Water Treatment Plant Capital Projects. The responsibilities of the Senior Project Manager will be to provide oversight for the investigative, design, construction, commissioning, and warranty services for the Filter Building components within the Water Treatment Plant Phase 2A and 2B upgrades. This position will require the qualifications and experience to project manage complex, large capital projects. The Senior Project Manager will also be responsible for the sponsorship oversight for the Project Manager led capital projects within the Water Treatment Plant Capital Program.

**What are the objectives of the request?** The recommended resource structure for the Water Treatment Plant Phase 2 Upgrade for the staffing request will provide a dedicated Capital staff.

**What are the expected outcomes of the request and the actions that will create these expected outcomes?** - A new Senior Project Manager will provide a dedicated focus on further advancing this large capital project into the next phase of the project, including issuing the RFP for engineering design and contract administration service.

**What is the challenge or opportunity that this request proposes to solve?** The staffing recommendations will ensure that Hamilton Water has the required staff resources to successfully design, construct, and commission an extremely complex capital rehabilitation and upgrade program at the City's most critical water facility.

**What value will the City gain from this request?** The recommendations in Report PW22078(a) will ensure that Hamilton Water has the required staff resources to successfully design, construct, and commission an extremely complex capital rehabilitation and upgrade program at the City's most critical water facility.

**Does the request provide value for money (efficiency and effectiveness) to a program or service?** There is ample evidence across municipalities that capital projects and programs with higher levels of staff turn-over result in projects that experience delays, increased overall project costs, and increased operational risk.

## 2. Implications if Request not permitted:

Not having this dedicated position will significantly increase risks including schedule and variances for the program, which has project timelines that are estimated to carry through to 2035 for the construction of both WTP Phases 2A & 2B.

**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?** Increased risk of infrastructure failure is accompanied by increased risk of regulatory non-compliance, fines, and exposes the City to significant liability. Mayor and Council, and senior members of City staff may also be exposed to personal liability under the Standard of Care Provisions within the Ontario Safe Drinking Water Act.

**What will be the risk, impact or consequence if the request is not approved?** if this request is not permitted, it would impact the existing water, wastewater and stormwater capital program resulting in increased risk of infrastructure failures, loss of water, wastewater or stormwater services, adverse public health impacts, adverse environmental impacts, and requiring expensive and unplanned emergency interventions.

## 3. Alternatives (if any):

Alternative 1: Staff could be directed to resource the Water Treatment Plant Phase 2 Capital Program by re-allocating existing Hamilton Water capital program staff. This alternative is not recommended because it would impact the existing water, wastewater and stormwater capital program resulting in increased risk of infrastructure failures, loss of water, wastewater or stormwater services, adverse public health impacts, adverse environmental impacts, and requiring expensive and unplanned emergency interventions.

Alternative 2: the new position could be approved on a temporary basis expiring at the end of the Water Treatment Plant Phase 2 Capital Program. This alternative is not recommended because it adds significant risk to the capital program resulting from increased staff turn-over. The Water Treatment Plant Phase 2 Capital Program represents a \$543M investment in the City's most critical water asset, with an accompanying 10-year program schedule. There is ample evidence across municipalities that capital projects and programs with higher levels of staff turn-over result in projects that experience delays, increased overall project costs, and increased operational risk.

## 4. Performance Measures:

Performance Measures will be based on the following:

**Is there baseline data available?** KPI targets for monitoring cashflows, schedules and budgets are currently in place.

**What target(s) in relation to a baseline demonstrate progress in achieving the expected outcome(s) of the request?**

Established KPI targets and outcomes include meeting the estimated project schedule and budget established in 2024 rate budget process. The performance will be measured, tracked and updated on a monthly basis.

**How will the performance of this request be measured and evaluated?** The performance of the Manager will be measured on the overall success of the Water Treatment Plant Capital program KPI target expectations, along with successful management of the staffing complement.

**CITY OF HAMILTON**  
**Woodward Water Treatment Plant Capital Program**  
**BUSINESS CASE #3**

BUSINESS CASE OVERVIEW	
<b>Request Title</b>	Project Manager, Capital Delivery, Woodward Water Treatment Plant Program
<b>Department/Division</b>	Public Works - Hamilton Water - Capital Delivery
<b>Request Driver</b>	Woodward Water Treatment Plant Phase 2 Capital Program
<b>Funding Source</b>	Project ID No. 5142166110 and 5143066110
<b>Proposed Start Date</b>	Q4 2024
<b>Strategic Plan Priorities</b>	Built Environment & Infrastructure <span style="float: right;">y</span>
<b>Do you Require the Use of External Consultants?</b>	no

2024 OPERATING BUDGET FINANCIAL IMPACTS		
DESCRIPTION	2024 AMOUNT	ANNUALIZED AMOUNT
Salary/Wages	<b>\$31,625</b>	<b>\$126,500</b>
Benefits	<b>\$7,625</b>	<b>\$30,500</b>
Add item here		
<b>Total Expenditures</b>	<b>\$39,250</b>	<b>\$157,000</b>
Capital Funding	<b>\$39,250</b>	<b>\$157,000</b>
<b>Total Revenue</b>	<b>\$39,250</b>	<b>\$157,000</b>
<b>Net Impact</b>	<b>\$0</b>	<b>\$0</b>
<b>Full Time Equivalent (FTE)</b>	<b>1.0</b>	<b>1.0</b>
<b>Capital Budget Impact</b>	<b>\$39,250</b>	<b>\$157,000</b>

**BUSINESS CASE DETAILS**

**1. Reason for Request:**

There is currently no dedicated Project Manager resource for the Water Treatment Plant Capital Projects. The responsibilities of the Project Manager will be to provide oversight for the investigative, design, construction, commissioning, and warranty services for the Chlorine Building components within the Water Treatment Plant Phase 2A and 2B upgrades.

**What are the objectives of the request?** The recommended resource structure for the Water Treatment Plant Phase 2 Upgrade for the staffing request will provide a dedicated Capital staff.

**What are the expected outcomes of the request and the actions that will create these expected outcomes?** - A new Project Manager will provide a dedicated focus on further advancing this large capital project into the next phase of the project, including issuing the RFP for engineering design and contract administration service.

**What is the challenge or opportunity that this request proposes to solve?** The staffing recommendations will ensure that Hamilton Water has the required staff resources to successfully design, construct, and commission an extremely complex capital rehabilitation and upgrade program at the City's most critical water facility.

**What value will the City gain from this request?** The recommendations in Report PW22078(a) will ensure that Hamilton Water has the required staff resources to successfully design, construct, and commission an extremely complex capital rehabilitation and upgrade program at the City's most critical water facility.

**Does the request provide value for money (efficiency and effectiveness) to a program or service?** There is ample evidence across municipalities that capital projects and programs with higher levels of staff turn-over result in projects that experience delays, increased overall project costs, and increased operational risk.

## 2. Implications if Request not permitted:

Not having this dedicated position will significantly increase risks including schedule and variances for the program, which has project timelines that are estimated to carry through to 2035 for the construction of both WTP Phases 2A & 2B.

**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?** Increased risk of infrastructure failure is accompanied by increased risk of regulatory non-compliance, fines, and exposes the City to significant liability. Mayor and Council, and senior members of City staff may also be exposed to personal liability under the Standard of Care Provisions within the Ontario Safe Drinking Water Act.

**What will be the risk, impact or consequence if the request is not approved?** if this request is not permitted, it would impact the existing water, wastewater and stormwater capital program resulting in increased risk of infrastructure failures, loss of water, wastewater or stormwater services, adverse public health impacts, adverse environmental impacts, and requiring expensive and unplanned emergency interventions.

## 3. Alternatives (if any):

Alternative 1: Staff could be directed to resource the Water Treatment Plant Phase 2 Capital Program by re-allocating existing Hamilton Water capital program staff. This alternative is not recommended because it would impact the existing water, wastewater and stormwater capital program resulting in increased risk of infrastructure failures, loss of water, wastewater or stormwater services, adverse public health impacts, adverse environmental impacts, and requiring expensive and unplanned emergency interventions.

Alternative 2: the new position could be approved on a temporary basis expiring at the end of the Water Treatment Plant Phase 2 Capital Program. This alternative is not recommended because it adds significant risk to the capital program resulting from increased staff turn-over. The Water Treatment Plant Phase 2 Capital Program represents a \$543M investment in the City's most critical water asset, with an accompanying 10-year program schedule. There is ample evidence across municipalities that capital projects and programs with higher levels of staff turn-over result in projects that experience delays, increased overall project costs, and increased operational risk.

## 4. Performance Measures:

Performance Measures will be based on the following:

**Is there baseline data available?** KPI targets for monitoring cashflows, schedules and budgets are currently in place.

**What target(s) in relation to a baseline demonstrate progress in achieving the expected outcome(s) of the request?**

Established KPI targets and outcomes include meeting the estimated project schedule and budget established in 2024 rate budget process. The performance will be measured, tracked and updated on a monthly basis.

**How will the performance of this request be measured and evaluated?** The performance of the Manager will be measured on the overall success of the Water Treatment Plant Capital program KPI target expectations, along with successful management of the staffing complement.

**CITY OF HAMILTON**  
**Woodward Water Treatment Plant Capital Program**  
**BUSINESS CASE #4**

<b>BUSINESS CASE OVERVIEW</b>	
<b>Request Title</b>	Engineering Technologist, Capital Delivery, Woodward Water Treatment Plant Program
<b>Department/Division</b>	Public Works - Hamilton Water - Capital Delivery
<b>Request Driver</b>	Woodward Water Treatment Plant Phase 2 Capital Program
<b>Funding Source</b>	Project ID No. 5142166110 and 5143066110
<b>Proposed Start Date</b>	Q4 2024
<b>Strategic Plan Priorities</b>	Built Environment & Infrastructure <span style="float:right">y</span>
<b>Do you Require the Use of External Consultants?</b>	no

<b>2024 OPERATING BUDGET FINANCIAL IMPACTS</b>		
DESCRIPTION	2024 AMOUNT	ANNUALIZED AMOUNT
Salary/Wages	\$21,925	\$87,700
Benefits	\$5,825	\$23,300
Add item here		
<b>Total Expenditures</b>	<b>\$27,750</b>	<b>\$111,000</b>
Add item here		
Capital Funding	\$27,750	\$111,000
Add item here		
<b>Total Revenue</b>	<b>\$27,750</b>	<b>\$111,000</b>
<b>Net Impact</b>	<b>\$0</b>	<b>\$0</b>
<b>Full Time Equivalent (FTE)</b>	<b>1.0</b>	<b>1.0</b>
<b>Capital Budget Impact</b>	<b>\$27,750</b>	<b>\$111,000</b>

**BUSINESS CASE DETAILS**

**1. Reason for Request:**

There is currently no dedicated Engineering Technologist resource for assisting with the Water Treatment Plant Capital Projects. The responsibilities of the Engineering Technologist will be to address the number of day-to-day requests received. This position is also required to provide project and program support, maintain a document management system and provide project controls for the various capital projects within the Water Treatment Plant Phase 2A and 2B upgrades and Program related tasks.

**What are the objectives of the request?** The recommended resource structure for the Water Treatment Plant Phase 2 Upgrade for the staffing request will provide a dedicated Capital staff.

**What are the expected outcomes of the request and the actions that will create these expected outcomes?** - A new Engineering Technologist will provide a dedicated focus on further advancing this large capital project into the next phase of the project, including issuing the RFP for engineering design and contract administration service.

**What is the challenge or opportunity that this request proposes to solve?** The staffing recommendations will ensure that Hamilton Water has the required staff resources to successfully design, construct, and commission an extremely complex capital rehabilitation and upgrade program at the City's most critical water facility.

**What value will the City gain from this request?** The recommendations in Report PW22078(a) will ensure that Hamilton Water has the required staff resources to successfully design, construct, and commission an extremely complex capital rehabilitation and upgrade program at the City's most critical water facility.

**Does the request provide value for money (efficiency and effectiveness) to a program or service?** There is ample evidence across municipalities that capital projects and programs with higher levels of staff turn-over result in projects that experience delays, increased overall project costs, and increased operational risk.

**2. Implications if Request not permitted:**

Not having this position will delay the implementation of Capital Projects currently budgeted for issuance and ensure our capital investment for water/wastewater/storm infrastructure renewal 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 assist in supporting the needs maintaining our capital program, ensuring our facilities meet regulatory compliance expectations, create more reliable assets to provide drinking water, wastewater and storm services to the public.

**What will be the risk, impact or consequence if the request is not approved?** If the Capital SPM position is not approved, the program will not be able to operate as planned, resulting in these delay of the implementation, and certain aspects of this program will be not be supported. Not having this support, there is the potential for HW's capital improvements to vertical infrastructure would be at risk, resulting in stations failing unexpectedly.

**3. Alternatives (if any):**

Not having this dedicated position will significantly increase risks including schedule and variances for the program, which has project timelines that are estimated to carry through to 2035 for the construction of both WTP Phases 2A & 2B.

**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?** Increased risk of infrastructure failure is accompanied by increased risk of regulatory non-compliance, fines, and exposes the City to significant liability. Mayor and Council, and senior members of City staff may also be exposed to personal liability under the Standard of Care Provisions within the Ontario Safe Drinking Water Act.

**What will be the risk, impact or consequence if the request is not approved?** if this request is not permitted, it would impact the existing water, wastewater and stormwater capital program resulting in increased risk of infrastructure failures, loss of water, wastewater or stormwater services, adverse public health impacts, adverse environmental impacts, and requiring expensive and unplanned emergency interventions.

**4. Performance Measures:**

Performance Measures will be based on the following:

- Is there baseline data available?** KPI targets for monitoring cashflows, schedules and budgets are currently in place.
- What target(s) in relation to a baseline demonstrate progress in achieving the expected outcome(s) of the request?** Established KPI targets and outcomes include meeting the estimated project schedule and budget established in 2024 rate budget process. The performance will be measured, tracked and updated on a monthly basis.
- How will the performance of this request be measured and evaluated?** The performance of the Manager will be measured on the overall success of the Water Treatment Plant Capital program KPI target expectations, along with successful management of the staffing complement.