Subject: **Designation of Lemieux Island Water Purification Plant, 1 Onigam Street, under Part IV of the *Ontario Heritage Act***

File Number: ACS2024-PDB-RHU-0005

Report to Built Heritage Committee on 9 July 2024

and Council 10 July 2024

Submitted on June 27, 2024 by Court Curry, Manager, Right of Way, Heritage, and Urban Design Services, Planning, Development and Building Services Department

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Ward: Kitchissippi (15)

Objet: **Désignation de l'usine de purification de l'île Lemieux, située au 1, rue Onigam, en vertu de la partie IV de la *Loi sur le patrimoine de l'Ontario***

Dossier : ACS2024-PDB-RHU-0005

Rapport au Comité du patrimoine bâti

le 9 juillet 2024

et au Conseil le 10 juillet 2024

Soumis le 27 juin 2024 par Court Curry, Gestionnaire, Services des emprises, du patrimoine, et du design urbain, Direction générale des services de la planification, de l'aménagement et du bâtiment

Personne ressource : Anne Fitzpatrick, Urbaniste III, Planification du Patrimoine

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Quartier : Kitchissippi (15)

REPORT RECOMMENDATION(S)

That the Built Heritage Committee recommend that Council:

1. **Issue a Notice of Intention to Designate the Lemieux Island Water Purification Plant, 1 Onigam Street, under Part IV of the *Ontario Heritage Act* according to the Statement of Cultural Heritage Value attached as Document 5.**

2. **Suspend the notice required under Subsections 29(3) and 34(1) of the Procedure By-law to consider this report at the July 10, 2024, Council meeting in order to complete the legislative process associated with this report within a timely manner.**

RECOMMANDATION(S) DU RAPPORT

Que le Comité du patrimoine bâti recommande ce qui suit au Conseil:

1. **Publier un avis d'intention de désigner l'usine de purification de l'île Lemieux, située au 1, rue Onigam, en vertu de la partie IV de la *Loi sur le patrimoine de l'Ontario*, conformément à la déclaration de la valeur sur le plan du patrimoine culturel faisant l'objet du document 5.**

2. **Suspendre l'obligation d'avis prévue aux paragraphes 29(3) et 34(1) du *Règlement de procédure* afin d'examiner ce rapport lors de sa réunion prévue le 10 juillet 2024 et ainsi de mener à terme, dans les délais prescrits, le processus législatif associé à ce rapport.**

BACKGROUND

This report has been prepared because designation under Part IV of the *Ontario Heritage Act* must be approved by City Council.

The Lemieux Island Water Purification Plant is a water treatment facility located on Lemieux Island in the Ottawa River, approximately two and a half kilometers west of Parliament Hill. The Pumping Station (1917-1932), the Chemical Building (1932), and the Filter Building (1932) form the historic core of the plant and are excellent examples of industrial buildings influenced by popular architectural styles of the early 20th century. The Lemieux Island Water Purification Plant represents a major technical achievement as the first water treatment plant in Ottawa, which ensured residents had access to clean drinking water.

The property was listed on the City of Ottawa's Heritage Register in 2019. Changes to the *Ontario Heritage Act* will result in the removal of the property from the City's Heritage Register if Council does not issue a Notice of Intention to Designate the property by January 1, 2027. Further, Council will not be able to re-list the property for five years after this date.

At its meeting of July 6, 2022, City Council provided the following direction to staff regarding heritage properties in Ward 15:

Direct Heritage Staff to undertake further analysis of properties in Ward 15 listed on the City's Heritage Register to establish a proactive approach for designation under Part IV of the Ontario Heritage Act.

This direction, along with the amendments to the *Ontario Heritage Act* through Bill 23, prompted staff to undertake a review of all listed properties in Ward 15. This property was identified by staff as a high priority for designation.

DISCUSSION

The Lemieux Island Water Purification Plant (1932) and the Britannia Water Purification Plant (1961) are the two surface water treatment plants operated by the City of Ottawa to supply clean drinking water. Water from the Ottawa River enters the plants through large intake pipes and a series of treatment steps successively remove undesirable substances such as colour, suspended particles, algae, bacteria, and viruses from the water. After the treatment process, water is pumped through the distribution network of watermains to reach customers over an area roughly 25 kilometres by 50 kilometres.

The Official Plan, the Provincial Policy Statement and the *Ontario Heritage Act* all provide policy direction related to the designation of individual properties under Part IV of the *Ontario Heritage Act*.

Official Plan

The Official Plan has policies related to cultural heritage in Section 4.5, Cultural Heritage and Archaeology. Section 4.5.1(3) states: "Individual buildings, structures, and sites shall be designated as properties of cultural heritage value under Part IV of the *Ontario Heritage Act*."

The property proposed for designation is owned by the City of Ottawa. The City of Ottawa's Official Plan section 4.5.3 states:

7) The City shall protect, improve, and manage City-owned built heritage resources in a manner that achieves or supports the heritage objectives of this Plan and sets an example of leadership in the conservation and stewardship of heritage resources.

8) The City shall designate City-owned built heritage resources that meet the criteria under the *Ontario Heritage Act* where appropriate and may prepare conservation plans for their maintenance.

Provincial Policy Statement (2020)

Section 2.6.1 of the Provincial Policy Statement (2020) contains the following policy regarding the protection of cultural heritage resources: “Significant built heritage resources and significant cultural heritage landscapes shall be conserved.”

Ontario Heritage Act

Part IV of the *Ontario Heritage Act* provides municipalities with the authority to designate properties of cultural heritage value. Section 29 of the *Ontario Heritage Act* sets out the process for the designation of individual buildings. It requires:

- That Council consult with its municipal heritage committee, and
- That the official Notice of Intention to Designate served on the owner and the Ontario Heritage Trust contain a description of the property and its heritage attributes, as well as a statement explaining the cultural heritage value or interest of the property and a statement that a notice of objection may be served on the clerk within 30 days after the date of publication of the notice of intention in a newspaper.

Per the “*Ontario Heritage Act* Alternative Notice Policy”, the Notice of Intention to Designate will be published on the City’s website in both official languages. Document 5 contains the Statement of Cultural Heritage Value for this property.

Ontario Regulation 09/06

Regulation 09/06 (see Document 3) establishes criteria to determine if a property is of cultural heritage value or interest. A property may be designated under Section 29 of the *Ontario Heritage Act* if it meets two or more of the nine criteria set out in the regulation.

Through research and evaluation, staff have determined that the Lemieux Island Water Purification Plant, meets eight of the nine criteria. Detailed research and analysis are outlined in the Heritage Survey and Evaluation form (see Document 4), and a brief analysis of each of the applicable criteria is provided below:

The property has design value or physical value because it is a rare, unique, representative, or early example of a style, type, expression, material or construction method.

The Lemieux Island Water Purification Plant has design value as an excellent example of an industrial complex influenced by popular architectural styles of the early 20th century. Constructed 1915-1917, the Pumping Station is constructed in a vernacular Romanesque Style with Classical Revival influences, as illustrated in its use of masonry, prominent round-arched arcade windows and pedimented main entrance. The Chemical Building and the Filter Building were both constructed in 1932 and illustrate the Art Deco Style. The Art Deco influence in the Chemical Building is evident in the use of smooth finish building materials such as limestone blocks, vertical bands of stone that create a graphic pattern and carefully defined proportions in the two rectangular towers. The ornate Filter Building showcases the Art Deco style on its interior and exterior and typical of the Art Deco style, the Filter Building features a symmetrical façade, prominent front entrance with recessed volumes, decorative motifs and geometrical patterns, bronze doors, and an overall emphasis on flat vertical linearism.

The property has design value or physical value because it displays a high degree of craftsmanship or artistic merit.

The decorative design of the historic buildings reflects the value placed on the design of important public infrastructure buildings in the early to mid-20th century. The buildings, notably the Filter Building, display a high degree of artistic merit in the architectural design and detailing including bas relief sculptures on the cornice and upper portion of the pilasters, decorative motifs and geometric patterns, bronze doors, and decorative marble panels. In addition, the interior of the Filter Building has ornate design features including a marble double return stairway, brass railings, and marble paneling.

The property has design value or physical value because it displays a high degree of technical or scientific merit.

The Lemieux Island Water Purification Plant has design value as a major historical technical achievement for the City of Ottawa in the provision of clean drinking water to residents. The water treatment facility utilized a multi-step treatment process that included sedimentation, coagulation, sand filtration, and chlorination. At the time of its construction the plant had capacity to filter 35,000,000 gallons of water daily and was designed to accommodate future expansions that would allow for the ultimate capacity of 84,000,000 gallons.

The property has historical or associative value because it has direct associations with a theme, event, belief, person, activity, organization, or institution that is significant to a community.

The Lemieux Island Water Purification Plant has historical value for its association with the establishment of a water supply system in Ottawa. Following typhoid outbreaks in 1911-1912, which were caused by pollution in the Ottawa River, the establishment of a clean water supply became a priority. It was the first water treatment plant in Ottawa and gave residents access to clean drinking water, which reflects the progress of public health and sanitation in Ottawa during the mid-20th century.

The property has historical or associative value because it demonstrates or reflects the work or ideas of an architect, artist, builder, designer, or theorist who is significant to a community.

The building has associative value as a representative work by Gore, Nasmith, and Storrie, a consulting engineering firm who was responsible for designing and building several major Canadian water treatment plants through the late 1920s and into the 1930s, including the Hamilton Water Filtration Plant (1933), the Glenmore Filtration Plant (Calgary, 1930-1933), and the R.C. Harris Water Treatment Plant (Toronto, 1932-1941).

The property has contextual value because it is important in defining, maintaining or supporting the character of an area.

The Lemieux Island Water Purification Plant is an integral component of a group of historic industrial infrastructure that defines the character of this portion of the Ottawa River, which includes the Hintonburg Pumping Station, the Fleet Street Pumping Station and its aqueduct. Together, these pieces of historic infrastructure form an industrial cultural heritage landscape that tells the story of water supply and treatment along this portion of the Ottawa river.

The property has contextual value because it is physically, functionally, visually, or historically linked to its surroundings.

The buildings are physically, functionally, and historically linked to their surroundings along the Ottawa River as a water treatment facility that has remained in use since its construction.

The property has contextual value because it is a landmark.

The Lemieux Island Water Purification Plant has contextual value as a notable landmark because of its highly visible location, large size and bold architectural detailing.

Extent of the Designation.

The Lemieux Island Water Purification Plant is an active water treatment facility located on a large property with additional buildings, accessory structures, operational infrastructure, and mechanical equipment related to its function. The newer buildings, additions and operational infrastructure do not contribute to the cultural heritage value of the plant. As such, staff recommend that the designation be limited to the attributes identified in the Statement of Cultural Heritage Value in Document 5, which includes the exterior of the three historic buildings, the specific interior elements of the Filter Building and the landscaped area to the west of the Filter Building. Staff recommend that all other interiors, later additions or modifications, new buildings, and the balance of the property, including lands and infrastructure, are excluded from the designation in order to ensure flexibility for this critical piece of municipal infrastructure. The proposed designation will not impact the active use of the buildings. These exclusions are specifically detailed in the Statement of Cultural Heritage Value, attached as Document 5.

Future Alterations

The Lemieux Island Water Purification Plant is a vital component of the City's water supply system. If the property is designated under the *Ontario Heritage Act*, a heritage permit will be required for alterations to the attributes identified in the Statement of Cultural Heritage Value in Document 5. Heritage Planning staff will ensure that all permits are issued in a timely manner without disruption to service. At the time of its construction in 1932, the plant was designed to accommodate future growth on the site. Heritage staff are aware that there may be requirements for expansions or alterations on the site in the future and will work with staff in Infrastructure and Water Services Department to ensure that the service and functionality of the plant continues, and the heritage character of the building is preserved. This approach mirrors the approach staff have recommended on other recent designations of infrastructure including hydro substations and the recently revised designation by-law for the Ottawa Waterworks.

Conclusion

The Lemieux Island Water Purification Plant, 1 Onigam Street, meets eight of the nine criteria outlined in Ontario Regulation 09/06 for designation under Part IV of the *Ontario Heritage Act*. Staff recommend that Council issue a Notice of Intention to Designate the Property under Part IV of the *Ontario Heritage Act*.

FINANCIAL IMPLICATIONS

There are no direct financial implications.

LEGAL IMPLICATIONS

There are no legal implications associated with implementing the report recommendation.

COMMENTS BY THE WARD COUNCILLOR(S)

The Ward Councillor is aware of the recommendation associated with this report.

CONSULTATION

Heritage staff have worked with staff in the Infrastructure and Water Services Department throughout the designation process. Infrastructure and Water Services Department are supportive of the proposed designation.

The Hintonburg Community Association and Heritage Ottawa have been notified of the proposed designation.

ACCESSIBILITY IMPACTS

The designation of this property under the *Ontario Heritage Act* does not impact the physical fabric of the building. While alterations to designated properties, including renovations to remove barriers for people with disabilities, require a heritage permit, the fees for these permits are waived and staff work with property owners to allow for accessibility retrofits.

ASSET MANAGEMENT IMPLICATIONS

The implementation of the Comprehensive Asset Management program enables the City to effectively manage existing and new infrastructure to maximize benefits, reduce risk, and provide safe and reliable levels of service to community users. This is done in a socially, culturally, environmentally, and economically conscious manner.

The recommendations documented in this report are limited to specific designated elements, characterized as heritage attributes. Renewal of these specific elements and the designated areas may result in increased costs and or schedule delays to secure heritage specialists, specialized materials and craftsmanship to maintain the cultural heritage value of the asset. This will need to be accounted for in the prioritization and scheduling of drinking water rate supported projects, as well as reflected in future iterations of the Drinking Water Asset Management Plan (AMP).

RISK MANAGEMENT IMPLICATIONS

There are no risk management implications.

RURAL IMPLICATIONS

There are no rural implications associated with this report.

APPLICATION PROCESS TIMELINE STATUS

There are no application timelines associated with designations under the *Ontario Heritage Act*.

SUPPORTING DOCUMENTATION

Document 1 Location Map

Document 2 Photos

Document 3 Ontario Regulation 09/06

Document 4 Heritage Analysis and Evaluation Report

Document 5 Statement of Cultural Heritage Value

DISPOSITION

1) Heritage Planning Branch, Planning, Development and Building Services Department, to prepare the Notice of Intention to Designate. Office of the City Clerk, Council and Committee Services to notify the property owner and the Ontario Heritage Trust (10 Adelaide Street East, third Floor, Toronto, Ontario, M5C 1J3) of Council's decision to issue a Notice of Intention to Designate 1 Onigam Street under Part IV of the *Ontario Heritage Act*.

2) Heritage Planning Branch, Planning, Development and Building Services Department to ensure publication of the Notice of Intention to Designate according to the requirements of Section 29 the *Ontario Heritage Act*.

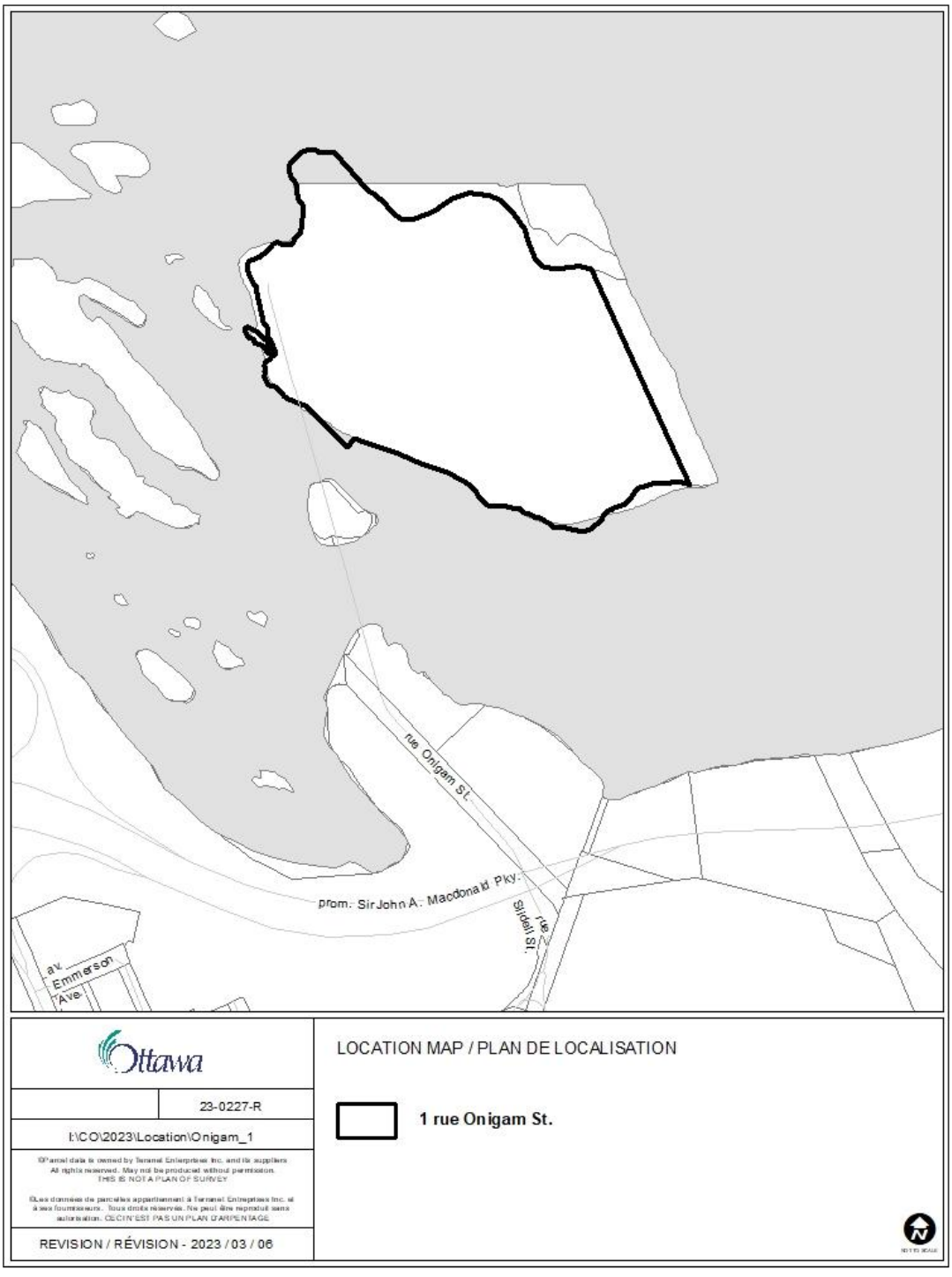
3) If the City Clerk receives a Notice of Objection under Section 29(5) of the *Ontario Heritage Act* within thirty days of the publication of the Notice of Intention to Designate, the Heritage Planning Branch, Planning, Development and Building Services Department is to prepare a report regarding the objection for consideration by Council within 90 days after conclusion of the objection period, according to Section 29(6) of the *Ontario Heritage Act*.

4) If the City Clerk does not receive any Notice of Objection under Section 29(5) of the *Ontario Heritage Act* within thirty days of the publication of the Notice of Intention to Designate, or if City Council decides not to withdraw the notice of intention to designate the property after an objection has been served, the

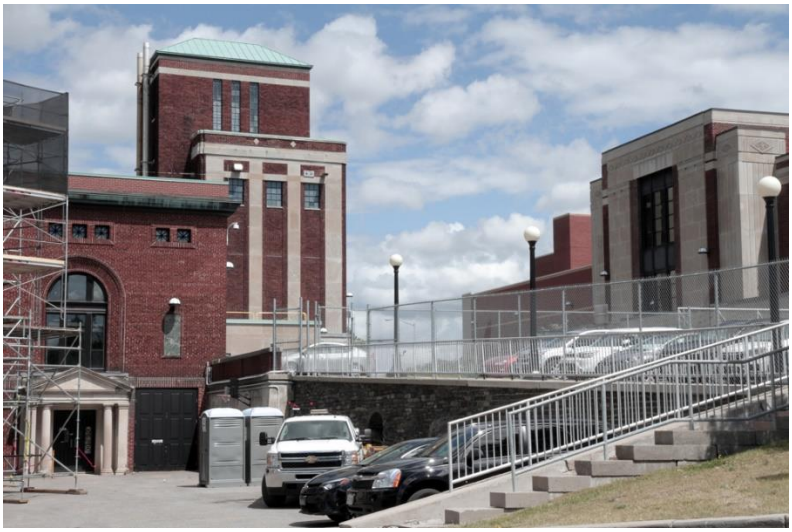
Heritage Planning Branch, Planning, Development and Building Services Department , is to prepare the designation by-law, under the authority of the approval of this report and Legal Services to submit to City Council for enactment within 120 days of the publication of the Notice of Intention to Designate as prescribed in Section 29(8) of the *Ontario Heritage Act*.

5) Office of the City Clerk, Council and Committee Services to cause a copy of the by-law together with a statement explaining the cultural heritage value or interest of the property and a description of the heritage attributes of the property, to be served on the owner of the property and on the Trust according to the requirements of the *Ontario Heritage Act*. Heritage Planning Branch, Planning, Development and Building Services Department to ensure publication of the notice of the by-law in the newspaper according to the requirements Section 29(8)(4) of the *Ontario Heritage Act*.

Document 1 – Location Map



Document 2 – Photos



Document 3 – Ontario Regulation 09/06

CRITERIA FOR DETERMINING CULTURAL HERITAGE VALUE OR INTEREST

Consolidation Period: From January 1, 2023 to the e-Laws currency date.

Last amendment: 569/22.

This is the English version of a bilingual regulation.

Criteria, s. 27 (3) (b) of the Act

1. (1) The criteria set out in subsection (2) are prescribed for the purposes of clause 27 (3) (b) of the *Act.* O. Reg. 569/22, s. 1.

(2) Property that has not been designated under Part IV of the *Act* may be included in the register referred to in subsection 27 (1) of the *Act* on and after the day subsection 3 (2) of Schedule 6 to the *More Homes Built Faster Act, 2022* comes into force if the property meets one or more of the following criteria for determining whether it is of cultural heritage value or interest:

1. The property has design value or physical value because it is a rare, unique, representative or early example of a style, type, expression, material or construction method.
2. The property has design value or physical value because it displays a high degree of craftsmanship or artistic merit.
3. The property has design value or physical value because it demonstrates a high degree of technical or scientific achievement.
4. The property has historical value or associative value because it has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community.
5. The property has historical value or associative value because it yields, or has the potential to yield, information that contributes to an understanding of a community or culture.
6. The property has historical value or associative value because it demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.
7. The property has contextual value because it is important in defining, maintaining or supporting the character of an area.
8. The property has contextual value because it is physically, functionally, visually or historically linked to its surroundings.
9. The property has contextual value because it is a landmark. O. Reg. 569/22, s. 1.

(3) For clarity, subsection (2) does not apply in respect of a property that has not been designated under Part IV but was included in the register as of the day subsection 3 (2)

of Schedule 6 to the *More Homes Built Faster Act, 2022* comes into force. O. Reg. 569/22, s. 1.

Criteria, s. 29 (1) (a) of the Act

2. (1) The criteria set out in subsections (2) and (3) are prescribed for the purposes of clause 29 (1) (a) of the Act. O. Reg. 569/22, s. 1.

(2) Section 1, as it read immediately before the day subsection 3 (2) of Schedule 6 to the *More Homes Built Faster Act, 2022* comes into force, continues to apply in respect of a property for which a notice of intention to designate it was given under subsection 29 (1.1) of the *Act* after January 24, 2006 and before the day subsection 3 (2) of Schedule 6 to the *More Homes Built Faster Act, 2022* comes into force. O. Reg. 569/22, s. 1.

(3) In respect of a property for which a notice of intention to designate it is given under subsection 29 (1.1) of the *Act* on or after the day subsection 3 (2) of Schedule 6 to the *More Homes Built Faster Act, 2022* comes into force, the property may be designated under section 29 of the *Act* if it meets two or more of the criteria for determining whether it is of cultural heritage value or interest set out in paragraphs 1 to 9 of subsection 1 (2). O. Reg. 569/22, s. 1.

Criteria, s. 41 (1) (b) of the Act

3. (1) The criteria set out in subsection (2) are prescribed for the purposes of clause 41 (1) (b) of the *Act.* O. Reg. 569/22, s. 1.

(2) Subject to subsection (3), in the case of a by-law passed under subsection 41 (1) of the Act on or after the day subsection 5 (1) of Schedule 6 to the *More Homes Built Faster Act, 2022* comes into force, a municipality or any defined area or areas of it may be designated by such a by-law as a heritage conservation district under subsection 41 (1) of the Act if the municipality or the defined area or areas of it meets the following criteria:

1. At least 25 per cent of the properties within the municipality or defined area or areas satisfy two or more of the following:

i. The properties have design value or physical value because they are rare, unique, representative or early examples of a style, type, expression, material or construction method.

ii. The properties have design value or physical value because they display a high degree of craftsmanship or artistic merit.

iii. The properties have design value or physical value because they demonstrate a high degree of technical or scientific achievement.

iv. The properties have historical value or associative value because they have a direct association with a theme, event, belief, person, activity, organization or institution that is significant to a community.

v. The properties have historical value or associative value because they yield, or have the potential to yield, information that contributes to an understanding of a community or culture.

vi. The properties have historical value or associative value because they demonstrate or reflect the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.

vii. The properties have contextual value because they define, maintain or support the character of the district.

viii. The properties have contextual value because they are physically, functionally, visually or historically linked to each other.

ix. The properties have contextual value because they are defined by, planned around or are themselves a landmark. O. Reg. 569/22, s. 1.

(3) Subsection (2) does not apply in respect of a by-law passed under subsection 41 (1) of the Act on or after the day subsection 5 (1) of Schedule 6 to the *More Homes Built Faster Act, 2022* comes into force if a notice of a public meeting required to be held for the purposes of the by-law under subsection 41.1 (7) of the *Act* was given before the day subsection 5 (1) of Schedule 6 to the *More Homes Built Faster Act, 2022* comes into force. O. Reg. 569/22, s. 1.

(4) For clarity, the requirement set out in subsection 41.1 (5.1) of the *Act*,

(a) does not apply in respect of a by-law under subsection 41 (1) of the *Act* that is passed before the day subsection 5 (1) of Schedule 6 to the *More Homes Built Faster Act, 2022* comes into force; and

(b) does not apply in respect of a by-law under subsection 41.1 (2) of the *Act*. O. Reg. 569/22, s. 1.

Document 4 Heritage Analysis and Evaluation Report

HERITAGE ANALYSIS AND EVALUATION

Building Name and Address: Lemieux Island Water Purification Plant, 1 Onigam Street, Ottawa, ON K1Y 2C4

Construction Date: c. 1915 – 1932

Original Owner: City of Ottawa

Prepared By: Anne Fitzpatrick

Image: Lemieux Island Water Purification Plant

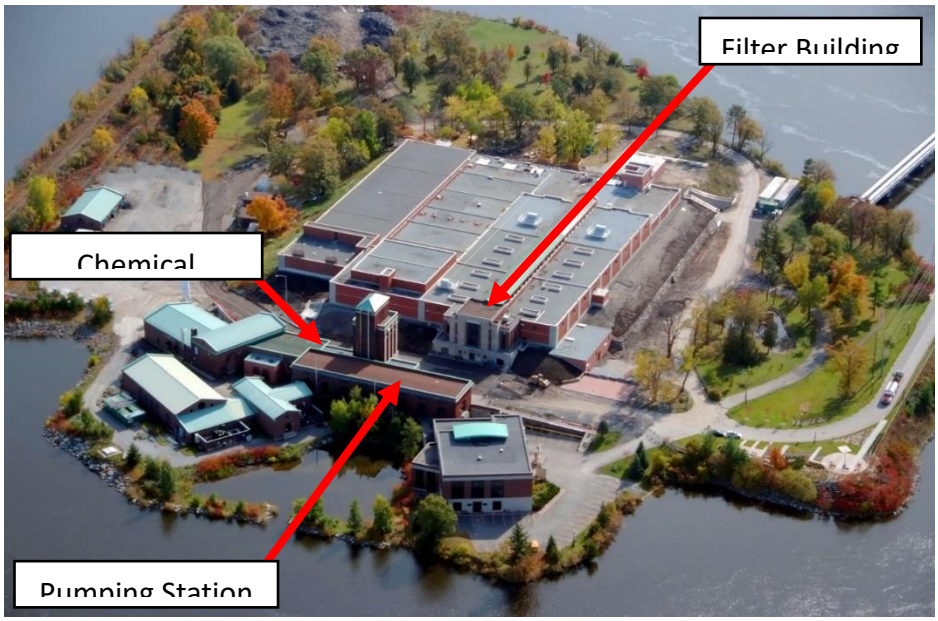
Executive Summary

The Lemieux Island Water Purification Plant is a water treatment facility located on Lemieux Island in the Ottawa River, approximately two and a half kilometers west of Parliament Hill. The island is accessed by a bridge that joins the southwest corner of the island to the south shore of the Ottawa River, near the junction of the Sir John A Macdonald Parkway and Slidel Street and Onigam Street. The entire island site is approximately 11 hectares.

The Pumping Station (1917-1932), the Chemical Building (1932), and the Filter Building (1932) form the historic core of the Lemieux Island Water Purification Plant. These buildings are excellent examples of industrial buildings influenced by vernacular Romanesque Revival and Art Deco styles. The Lemieux Island Water Purification Plant represents a major technical achievement as the first water treatment plant in Ottawa, which ensured residents had access to clean drinking water. The Lemieux Island Purification Plant is historically and visually connected to a series of historical water works facilities in this area including the Fleet Street Pumping Station and its aqueduct, the Hintonburg Pumping Station, and the ring dam at Chaudière falls. The Lemieux

Island Water Purification Plant is a landmark because of its highly visible location, large size and bold architectural expression.

The property has cultural heritage value for its design, associative and contextual values. It meets eight of the nine criteria for designation under Part IV of the *Ontario Heritage Act*.



Aerial Image with Labels of Lemieux Island Water Purification Plant, ("Lemieux Island Water Purification Plant")

<u>Acknowledgement</u>

It should be acknowledged this report and the pre-contact history of Lemieux Island was written using a variety of sources and archaeological research and is from a non-Indigenous perspective. This is a synopsis and is not representative of the complete, rich history of the Algonquin Anishinaabeg in the Ottawa River watershed.

Indigenous Pre-Contact History

Lemieux Island is located within the traditional and unceded homeland of the Algonquin Anishinaabeg. The site is situated in the Kichi-Sìbì, immediately south of the Quebec Ontario border, and is approximately two kilometers west of the Chaudière Falls and five kilometers west of the Pasapkedjiwanong (now known as the Rideau River).

Indigenous people have lived in what is now southern Ontario since time immemorial continuously to today. Central to Indigenous culture is their interconnected relationship with the land.

Concentrated around the Great Lakes, the Anishinaabeg historically used the waterways as primary routes for transportation, trade, and communication. For this reason, the Algonquin Anishinaabeg centered their homeland around the junction of

three major waterways, the Ottawa River, Rideau River, and Gatineau River.[1] The Kichi-Sìbì, which translates to “Great River,” served as the main highway between the St. Lawrence, the Great Lakes, and the interior for Indigenous peoples and later European explorers, fur traders, and missionaries.

The Algonquin were the first and continuous inhabitants of the Kichi-Sìbì (now known as the Ottawa River). At the time of contact, an Algonquin band on Morrison Island referred to themselves the Kichesippirini, “the People of the Great River,”[2] and Samuel de Champlain called the Ottawa River the “River of the Algonquins.”[3] The heartland of the Algonquin Nation has always encompasses the complete length of the Ottawa River, stretching from the Lake of Two Mountains outlet near Montreal to the Lake Capimitchigama headwaters in north central Quebec.[4] The history of the Algonquin peoples in inextricably intertwined with the history of the Ottawa River watershed.[5]

The Algonquins were semi-nomadic, living along the banks of the Ottawa River. In the summer months, they traveled by birch bark canoes or foot, and lived in large groups to hunt, gather, fish, trap, and socialize [6] Come the winter months, they travelled using snowshoes and toboggans, and lived in smaller hunting groups.[7]

The Chaudière Falls was and remains a prominent feature in the Ottawa River. It was a summer place for meeting and trade and held spiritual significance to Indigenous peoples of the area. When Samuel de Champlain described visiting the site in 1613, he indicated the “usual” ceremony was conducted, which included a chief giving a speech to a group, and an offering of tobacco cast into the falls to the gods to provide protection from rivals.[8]

The strong currents of the Ottawa River moving towards the south shore and Lemieux Island made the northern shore the natural area to complete the major portage to bypass the immense Chaudière Falls. Today, north of the Chaudière Falls is Parc des Portageurs and this accurately named path was used for millennia as a portage route by Indigenous peoples, and later explorers and fur traders.[9] In 2017, River Street, connecting the Kichi Zībī Mīkan to Bell Island and Lemieux Island, was renamed to

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[1] James Powell, “The Anishinabek,” The Historical Society of Ottawa, accessed February 27, 2024, https://www.historicalsocietyottawa.ca/publications/ottawa-stories/momentous-events-in-the-city-s-life/the-anishinabek

[2] Peter Hessel, *The Algonkin Tribe: The Algonkins of the Ottawa Valley: An Historical Outline*, (Arnprior, Ontario: Brittle Printing Limited, 1987), 7.

[3] Robert Haig, *Ottawa: City of Big Ears*, (Ottawa: Haig, 1975), 42.

[4] James Morrison, Sicani Research and Advisory Services, “Algonquin History in the Ottawa River Watershed,” accessed February 27, 2024, www.thealgonquinway.ca/pdf/algonquin-history.pdf, 17.

[5] Morrison, Algonquin History in the Ottawa River Watershed, 17.

[6] Algonquins of Ontario, “Our Proud History,” accessed February 27, 2024, https://www.tanakiwin.com/algonquins-of-ontario/our-proud-history/

[7] “Our Proud History.”

[8] “The Anishinabek.”

[9] National Capital Commission, “Portageurs Park,” accessed February 27, 2024, https://ncc-ccn.gc.ca/places/portageurs-park#.

Onigam Street, after the Algonquin word for "portage."[10] This may suggest Lemieux Island served as an alternative portage route along the southern shore.

Several archaeological sites around the Ottawa-Gatineau region along the shore of the three prominent rivers, demonstrates the continuous presence of the Algonquin, centered around the National Capital Region. The area from the Chaudiere Falls to Leamy Lake Park and the surrounding shores was and is a cultural landscape where the First Nation had a deep, interconnected relationship between the land and the landscape. Today's Leamy Lake Park, located at the mouth of Gatineau River, was an important summer gathering place for Indigenous people. Archaeological excavations indicate this is the largest collection of pre-contact sites in the Ottawa River watershed.[11] Hull Landing, today's location of the Canadian Museum of History, was a culturally important landscape as campsite and a sacred burial ground to Indigenous peoples.[12] Chert debitage and tools have been found near Moussette Park[13] and Val-Tétreau[14] in Gatineau, northwest of Lemieux Island. Additionally, there were land routes heading west beginning at Ruisseau de la Brasserie and from the burial site near the Monument to the Algonquin Chief Tessouat. as well as a portage route from Governor Bay and Rockcliffe Park to the Rideau River. Although modern archaeological investigations at Lemieux Island in relation to the water filtration plant have not recovered any pre-contact and/or historic archaeological artifacts, surrounding sites and evidence suggest this absence is not an indication of a lack of Indigenous presence. Rather, it demonstrates the intense development and alteration of the island in relation to water works projects since the early twentieth century.

Architecture

The Pumping Station

Description

The Pumping Station (1917-1932) is a two-and-a-half-storey, flat-roofed, rectangular, brick building on the north end of the complex. It is attached to the Chemical Building at the south and to newer buildings to the east and west. The Pumping Station sits roughly one storey below grade of the Chemical Building, which results in a steep embankment

[10] Kitchissippi Ward, "Onigam Street re-naming recognizes Algonquin history in Kitchissippi," last modified November 21, 2017, https://kitchissippiward.ca/content/onigam-street-re-naming-recognizes-algonquin-history-kitchissippi.
[11] National Capital Commission, "Public Archaeological Digs," accessed February 27, 2024, https://ncc-ccn.gc.ca/events/public-archaeological-digs.
[12] Randy Boswell, "Gatineau shoreline tells Canada's story and should be a National Historic Site," Ottawa Citizen, December 18, 2015, https://ottawacitizen.com/news/local-news/randy-boswell-gatineau-shoreline-tells-canadas-story-and-should-be-a-national-historic-site.
[13] CH2MHILL, Lemieux Island Filter Expansion Environmental Study Report, 2005.
[14] Canadian Museum of History, "Kichi Sibi: Tracing Our Region's Ancient History – Archaeological Sites in the Ottawa-Hull Area," accessed February 27, 2024, https://www.historymuseum.ca/cmc/exhibitions/archeo/kichisibi/k700-otthulle.html.

to the south. The old plant intake was located at the north side of the pumping station, as depicted in the 1936 photo below. With the relocation of the plant intake to the east, the former intake is now a small pond.

Pumping Station: front elevation

Photo: City of Ottawa, 2022

Pumping Station north façade

Photo: City of Ottawa, 2022

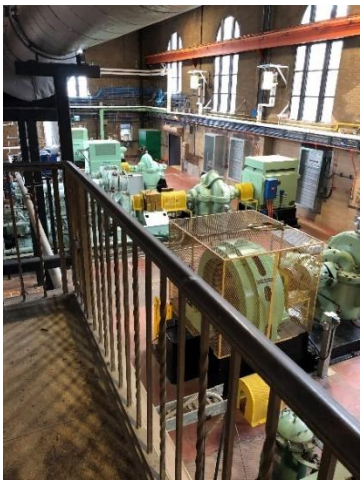
1936 Aerial view of Ottawa Water Purification Plant Lemieux Island, Ottawa, Ont. LAC, Item Number: 3325364, Item Title: a043807-v

Function

The Pumping Station is located north of the Filter Building and houses high lift pumping equipment for the water treatment plant. After the water is treated in the Plant, it flows through buried and below grade piping back to the Pumping Station. There are four high lift pumps in the Pumping Station; three were built by Allis Chalmers, and the fourth was built by Ingersoll Rand. The high lift pumps send the treated water into the City's water distribution system. The east end of the building now contains standby power generators while the west end contains high lift pumps.

Pumping Station interior

Photo: City of Ottawa, 2022



Pumping Station interior

Photo: City of Ottawa, 2022

Architecture

The Pumping Station was constructed over two distinct periods: the western portion of the building was completed in 1917 and, when the Plant was expanded in 1932 to include settling and filtration processes, an eastern addition which mirrored the western portion was added to accommodate low lift pumps. The addition matches the original design, but is distinguishable by the lighter brick, notably on the northern façade.

The Pumping Station was constructed in a vernacular Romanesque Revival style with Classical Revival influences, as illustrated in the use of masonry, prominent round-arched arcade windows, the pedimented main entrance, and the round arched entrance on the east façade. The Romanesque Revival style was popular in Canada at the turn of the 20th century and a simplified version of the style was often used for commercial, industrial, and modest public buildings. The main entrance on the west façade of the Pumping Station has a decorative, neo-classical portico and a large, round-arched window, flanked on either side by decorative marble panels with stylized light fixtures. Featured throughout the building, these light fixtures were later additions and display a modern influence in style. The building features a prominent metal cornice, long round-arched windows with a set of square windows above, and a simple, round-arched entranceway on the eastern façade

The Pumping Station’s two-storey interior space is open-concept, with a small viewing gallery which runs along the wall on the south side. The structure as well as some of the piping and pumping equipment is original and is still in use. The room is tiled and has brass features including the railings, the control room window, and other fittings that likely date from the 1930s expansion.

The Chemical Building

Description

The Chemical Building is a single storey stone building with a four-storey tower that features vertical bands of stone and brick. It was completed in 1932 during the major expansion of the plant and is attached to the south side of the Pumping Station.

View from inside the Chemical Building Tower, showing the square window pattern also found in the earlier Pumping Station

Photo: City of Ottawa, 2022

Chemical building tower

Photo: City of Ottawa, 2022

Southern façade of the Chemical Building

Photo: City of Ottawa, 2022

Room with access to container silos

Photo: City of Ottawa, 2022

Function

The Chemical Building tower was built to contain silos for lime and alum storage, products which were used in the water treatment process. The chemicals were delivered by railway car, using the historic Chief William Commanda bridge, to the four large storage bins (two of sulphate of alumina and two of lime) in the upper section of the building. The chemicals were conveyed to the dry feed chemical machines on the lower floor. The building originally also contained an office, locker rooms, and chlorine

feed equipment but this is now used for laboratory facilities. The tower is no longer in use.

Architecture

The Chemical Building shows influence of the Art Deco Style, which was popular in the 1920s and 1930s. Often used in high-rises, commercial properties, banks and government buildings, the Art Deco style was classical in its symmetry, mouldings and use of proportions. It also incorporated, flattened and streamlined elements. Common materials were stone, cast stone, bronze and steel. Typical of its style, the Chemical Building features smooth finish building materials such as limestone blocks, vertical bands of stone that create a graphic pattern and carefully defined proportions in the two rectangular towers.

The tower massing is comprised of two rectangular elements. The lower part of the tower houses the massive container silos that were filled with lime and alum from railroad cars. The taller portion of the tower, accessed by a stairwell, has a large room with access to a balcony that wraps around the southern and eastern façade of the tower. The upper storey has three, symmetrical, centred windows on each façade, which rise from the floor level to a stone stringcourse above. The windows are crowned with a square pattern that mimics the one found on the upper fenestration of the Pumping Station. The Chemical Building tower is the tallest structure on Lemieux Island and is a visible landmark from different vantage points on both Ottawa and Gatineau shores.

The interior of the Chemical Building features modern technology and equipment. The interior was not intended for public viewing and does not feature any notable decorative elements.

Filter Building

Description

The Filter Building was completed in 1932. It is a four-storey building with a prominent, symmetrical front elevation. The Filter Building’s heritage elements are primarily its northern elevation and its interior as the other facades have been reconstructed.

Function

The Filter Building primarily contains the sand filters, wash water pumps, piping, operating galleries and the clearwells. The northern end of this building once housed the administrative functions of the plant, which have since moved to a new building. The pipe and operating galleries are located in the centre of the building. Originally there were 10 rapid sand filters with an area of 27 feet by 55 feet located on either sides of the gallery. Today, the Filter Building houses 18 rapid sand filters that filter treated water. Interestingly, at the time of its construction and in anticipation of future city growth, the building was built with the foundations in place for a total of 24 rapid sand filters. After filtration, water is disinfected and directed into a divided clearwell located beneath the filters. Once disinfection is complete, water is returned to the Pumping Station, for distribution throughout the City.

Architecture

Filter building elevation

Photo: City of Ottawa, 2022

Filter building elevation

Photo: City of Ottawa, 2022

Detail over main entrance

Photo: City of Ottawa, 2022

Whereas the Chemical Building is more reserved in its design, the ornate Filter Building showcases the Art Deco style architecture on both its interior and exterior. The Art Deco influence is evident in the prominent front entrance with recessed volumes and bronze doors, decorative motifs and geometrical patterns, and an overall emphasis on flat vertical linearism. The interior features materials commonly used in the Art Deco style, such as marble, terrazzo and bronze.

The Filter Building, like the Chemical Building, features a contrasting palette of limestone and red brick. This balance of colours and materials creates a balanced, symmetrical façade. The ground floor is clad in Queenston limestone. On top of the ground floor sits a prominent vertical, rectangular, limestone massing that extends to the top of the building. The stone central massing is flanked by two lower, recessed pilasters. The limestone pilasters are abutted by another brick vertical massing, which is lower and setback further still. Bas relief sculptures run along the cornice of the building, as well as the upper portions of the pilasters. The horizontality of the limestone ground floor and string courses balance the vertical emphasis of the building's composition. The central massing of the Filter Building's northern elevation has a large window that occupies two thirds of the building's height and is divided into a

rectangular grid. The main entrance features bronze doors surrounded by an art deco frame and light fixtures.

The walls in the entrance hall and main stairway of the Filter Building were constructed with Hauteville marble with cobwebbed veined black and gold trim. The floors are made of Roman Travertine inlaid marble. The main stairway is a monumental double return staircase with brass railings; on the first landing, there is a large commemorative bronze plaque. The plaque lists the names of the public servants who were involved in the expansion of Lemieux Island Water Purification Plant. There is also a small water feature (now hidden from view) which once featured flowing samples of untreated river water and treated water as a demonstration of the plant's abilities.

On the upper storey is the vast hallway of the operating gallery with windows that overlook the adjoining filter areas. Pilasters that stretch from wall to ceiling create the effect of a vaulted ceiling, rhythmically segmenting the hallway. The roof covering the hallway is in fact a monitor, allowing light in through high windows while the roofline of the building begins at the base of those high windows. The indicator and automatic signal lights were erected on the spandrel over the entrance. Italian marble tables are equipped with specially designed bronze loss-of-head and rate-of-flow instrument cases in keeping with the architectural character of the building.

Double return staircase

Filter Gallery Hallway with Clerestory Windows

Photo: City of Ottawa, 2022

Indicator and signal lights
City of Ottawa, 2022

Photo: City of Ottawa, 2022

Marble tables with bronze instrument cases Photo:
Photo: City of Ottawa, 2022

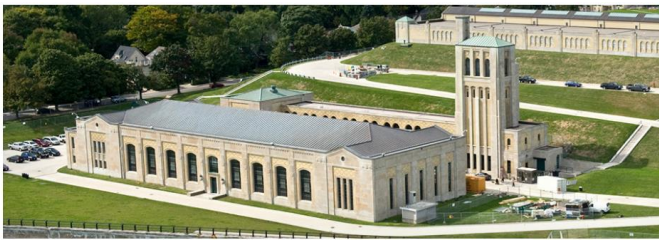
The Lemieux Island Water Purification Plant is an important example of an early to mid-20th century water treatment facility. The decorative design of the buildings at Lemieux Island Water Purification Plant reflects the expansion of the city's water supply network in the early to mid-20th century and the importance of municipal infrastructure. The industrial function of the buildings is evident in expansive windows to provide natural light, large doors to provide access and huge open spaces to accommodate equipment. However, the buildings also have prominent architectural styles and features that display excellent craftsmanship, including the impressive entrances, decorative stone detailing, cornices, and ornamental motifs. On April 30, 1932, the Ottawa Citizen reported:

> The water works plant of any city should be the city's greatest pride. The pumping station and purification building should exemplify the highest degree of sanitation and the buildings themselves should be surrounded by a park, which by its outward appearance sets forth the best evidence of being consistent with its claim to a pure water supply. Well-kept grounds and buildings make a favorable and lasting impression on the person inspecting them and the psychology of this is simple but well worthwhile. The result is that when the consumer, after having made a visit to the grounds, takes a drink of water at home, the picture of attractive grounds and the perfectly sanitary

buildings and equipment will immediately flash to his mind, and he will feel assured that the members of the water department are interested in his good health and are doing everything possible to safeguard it.

The decorative design of public infrastructure buildings, such as water treatment facilities, was intended to create civic pride and emphasize the important function of these buildings. This trend can be seen in public buildings both locally and nationally that were constructed during this time period.

Glenmore Water Treatment Plant, Calgary. c.1933. (Glenmore Water Treatment Plant. Canada's Historic Places.)



R.C. Harris Treatment Plant, Toronto. C. 1941 (City of Toronto)

Beauharnois Generating Station,QC, c.1929-1932.

Hydro Sub-Station, 1275 Carling Avenue Ottawa, c. 1929

Architect

The construction of the High Lift Pumping Station (1915-1917) was supervised by. J.B. McRae, Consulting Engineer and W.E MacDonald, the City's Water Works Engineer. The 1928-1932 Water Purification Plant was designed and constructed by consulting engineering firm Gore, Nasmith and Storrie. The firm designed and built several major Canadian water treatment plants in the late 1920s and into the 1930s, including the Lemieux Island Water Purification Plant (Ottawa, 1928-1932), the Hamilton Water Filtration Plant (Hamilton, 1933), the Glenmore Filtration Plant (Calgary) and the R.C. Harris Water Treatment Plant (Toronto, 1932-1941). The firm was renowned for their work in water supply and sewage treatment.

R.C. Harris Water Treatment Plant (Toronto, 1932-1941)

History

The Lemieux Island Purification Plant has historical value for its associations with the establishment of the water supply system in Ottawa. Lemieux Island was the first water treatment plant in the city and its construction marked a pivotal moment the history of Ottawa's water supply system.

In 1872, in order to provide residents with clean drinking water and in combination with concerns stemming from the Carleton Country fire of 1870 and the Great Chicago fire of 1871, Ottawa City Council engaged Thomas Coltrin Keefer to oversee the design and construction of the City Water Works building and aqueduct at Lebreton Flats. Thomas Keefer was one of the leading civil engineers in Canada in the mid-19th century. The Water Works took advantage of a natural depression on the flats for the open aqueduct and rather than using the steam-driven pumps that were typical of the period, the pumps were hydraulic. Water was drawn in from the headworks above the Chaudière Falls and fed through the open aqueduct to waterwheels connected to two large pumps. A water pipe in the aqueduct provided clean drinking water to the municipal system. Water pollution in the Ottawa River was a major issue in securing a clean water supply

and intake pipes were established upstream to bring in clean water to the headworks of the aqueduct.

In 1910, the City of Ottawa commission a report by Mr. Allen Hazen to determine the best method to improve water quality. The report concluded that the Ottawa River could no longer be relied upon as a source of clean drinking water, and recommended channeling water from McGregor Lake in the Gatineau hills to the city. This concept would be repeatedly proposed and investigated over the next decade. The report suggested that if the Ottawa River continued to be used as the water supply, immediate action would have to be taken to add hypochlorite of lime as a disinfectant, and that eventually a filter system on Lemieux Island should be constructed to connect to the existing pumping system.

In 1911, chlorinating equipment was installed at the headworks of the City Water Works on LeBreton Flats but despite this, in 1911 and 1912, Ottawa had two devastating typhoid outbreaks and clean water became a prominent and political issue in Ottawa for years to come.

In a 1912, the Ontario Board of Health recommended that a rapid sand filtration plant should be established on Lemieux Island. Dr. MacCulloch, Chief Health Officer for the Ontario, identified local sources of pollution contaminating the city water as the cause of the outbreak. Defective joints in the intake pipes had allowed raw sewage from a creek that ran through heavily populated Hintonburg to enter the water works system. Dr. MacCulloch threatened to take the control of the water supply from the City Water Works Commission

Following MacCulloch's recommendation, the Commissioners voted to construct a $75,000 plant on Lemieux Island. Engineer Alan Hazen was again consulted, and he recommended a filtration plant for Lemieux. The plan included a low lift pumping station, sedimentation basins and filter beds; the filtered water would then flow through a tunnel under the river to the Queen Street Pumping Station. The proposal was defeated in a vote at City Council.

In 1913, the Water Works Committee approved a temporary sedimentation basin and hypochlorite of lime treatment facility on Lemieux Island. The Lemieux Island High Lift

Pumping Station, which was later expanded to include both high and low lifts, took place between 1915-1917. In 1916, the Lemieux Island bridge, one of Canada's longest stone arch bridges, which has since been demolished and replaced, was completed.

From the 1920s onwards, there was growing concern that treating water through only chlorination was insufficient to maintain a clean water supply. Dr. A.E. Berry, Chief Sanitary Engineer of Ontario noted that "Only a slim line of defense stands between the City of Ottawa and a serious typhoid epidemic. Chlorination is not sufficient protection… Filtration is essential, and I believe that if the Ottawa water is coagulated, filtered and sterilized, the City of Ottawa will have the best drinking water in Canada" Mr. A.F. Macallum, Commissioner of Works, was a key advocate for the establishment of a filtration plant on Lemieux Island and brought forward a report recommending its establishment in 1924, and again in 1928. Eventually, in December 1928, the decision was made to construct the Lemieux Island Water Purification Plant.

Between 1929 and 1932, a massive expansion of the existing facilities on the island and the construction of the filtration plant and was undertaken to provide clean filtered water. The new facility utilized a multi-step treatment process that included sedimentation, coagulation, sand filtration, and chlorination. The filtration process included sedimentation basins that were located in the natural bay on the river where intakes were constructed. The water then went to the Pumping Station, which is located right next to the sedimentation basin, which contains both low and high lift pumps. Adjacent to the Pumping Station is the Chemical Building, which housed the chemicals to treat the water. The chemicals were delivered by Railway car to the four large storage bins (two of sulphate of alumina and two of lime) in the upper section of the building. The chemicals were conveyed to the dry feed chemical machines on the lower floor. The Filtration Building contained the distribution chambers, static mixing tanks, coagulation basins, settled and wastewater ducts, sand filters, wash water tank, pipe and operating galleries and the filtered water reservoir. The pipe and operating galleries were located in the centre of the building and five rapid sand filters with an area of 27 feet by 55 feet were located on each side of the gallery, The filtered water reservoir is located immediately beneath the sand filters.

Whereas previously water had been treated very heavily with chlorine, it now received only a fraction of that, which greatly improved the taste. The development on the island between 1928 and 1932 was marked by elegant new buildings that utilized rich materials like limestone, marble, and bronze.

During this period, the grounds of Lemieux Island were completely reconstructed, and a large public park was developed through a grant from the unemployment relief measures. This included the removal of all trees and overgrowth on the island and extensive planting of new trees, shrubs, and gardens. The site was completely re-graded and large stone retaining walls were constructed and a pond was added.

The official opening of the Water Purification Plant took place on April 30, 1932, with great celebration, and marked a milestone in water treatment in Ottawa.

An article in the Ottawa Journal in 1932 stated, “The Citizens of Ottawa may at last well be proud of their new plant, for in the words of Dr. A.E. Berry, Chief Sanitary Engineer of Ontario: ‘It is one of the finest, if not the finest water purification plant on the American continent.’”

20 THE OTTAWA JOURNAL SATURDAY, APRIL 30, 1932.

NEW PLANT DESIGNED TO FURNISH 35,000,000 GALLONS DAILY

Water Treating System Checked Typhoid Fever

How Vigilance of City Waterworks Officials in Use of Chemicals Kept Supply in Past Years Free of Contamination.

A Delightful Addition to the Showplaces of the Capital

In planning for the development of Lemieux Island, Controller G. M. Geldert, M.D., who has charge of the waterworks department, aimed to make it one of the showplaces of the city, and the picture shows illustrates how far along this has work has already been completed, with grounds neatly graded and hundreds of shrubs planted.

Instrument Man

Facts About the New Water Plant

Site: Lemieux Island, off Bayview Road.
Cost: $1,315,000.
Type: Rapid sand purification.
Present capacity: Filtering of 35,000,000 gallons of water in every 24 hours.
Ultimate capacity: Filtering of 54,000,000 gallons of water in every 24 hours.
Construction: Began on November 6, 1929.

Steady Supply of Water to City

Estimate $130,000 Free Water Supply Given by Dept.

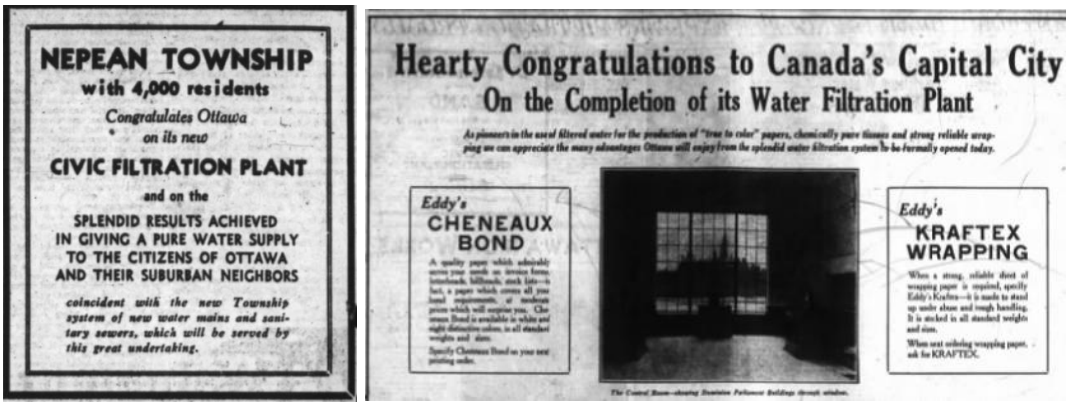
This Includes Water for Parks, Driveways, Public Baths, Rinks, and for Street Flushing.

Improved Water Supply An Issue for Twenty Years

Situation Investigated by Noted Authorities—Five Votes of Ratepayers on Various Schemes Between 1910 and 1928.

Newspaper coverage of the Opening of Lemieux Island, (April 30, 1932)

Ottawa Journal



Hearty Congratulations to Canada's Capital City on the Completion of its Water Filtration Plant (1932, April 30). *The Ottawa Journal*

From the 1930s up until the present, the Water Purification Plant has continued to develop with the installation of new equipment, building additions and technologies.

Context

The Lemieux Island Water Purification Plant defines the character of Lemieux Island and the surrounding area. As a functioning water purification plant that has remained in use since its construction, it is historically and functionally linked to the development of the municipal water supply in Ottawa along the Ottawa River.

Landscaped grounds and pond at Lemieux Island
Photo: City of Ottawa, 2016

The Lemieux Island Water Purification Plant is an integral component in a series of historical infrastructure that includes the Hintonburg Pumping Station, the Fleet Street Pumping Station and its aqueduct, and the ring dam at Chaudière falls. Together, these pieces of historic infrastructure form an industrial cultural heritage landscape along this portion of the Ottawa river.

The Lemieux Island Water Purification Plant contributes to the industrial legacy of Mechanicsville. It is located near other significant former industrial sites including the Hintonburg Pumping Station (5 Onigam), and Bayview Yards, the former City of Ottawa Workshops (7 Bayview) and the historic Chief William Commanda rail bridge, which runs from the Ottawa to Gatineau shores via Lemieux Island.

The landscaped grounds on Lemieux Island were constructed when the plant was expanded in 1928-1932. The landscape plans for the island were prepared by the Federal District Commission and featured a variety of mature trees, and landscaping features including a large pond with stone retaining walls. The carefully landscaped grounds surrounding the buildings help emphasize the prominent architecture of the historic buildings.

Its prominent location, large size and bold architectural detailing make the Water Purification Plant a landmark. The view of the Water Purification Plant is unobstructed and is highly visible from the pedestrian and cycling paths that run along the both the Ontario and Quebec side of the river. The 100 ft. tower of the Chemical Building is an iconic element of the complex from a distance.

Evaluation using Ontario Regulation 09/06

1	*The property has design value or physical value because it is a rare, unique, representative or early example of a style, type, expression, material or construction method.* **Rationale:** The Lemieux Island Water Purification Plant has design value as an excellent example of an industrial complex influenced by popular architectural styles of the early 20th century. Constructed 1915-1917, the Pumping Station is constructed in a vernacular Romanesque Revival style with Classical Revival influences, as illustrated in its use of masonry, prominent round-arched arcade windows and pedimented main entrance. The Chemical Building and the Filter Building were both constructed in 1932 and illustrate the Art Deco Style. The Art Deco influence in the Chemical Building is evident in the use of smooth finish building materials such as limestone blocks, vertical bands of stone that create a graphic pattern and carefully defined proportions in the two rectangular towers. The ornate Filter Building showcases the Art Deco style on its interior and exterior and typical of the Art Deco style, the Filter Building features a symmetrical façade, prominent front entrance with recessed volumes, decorative motifs and geometrical patterns, bronze doors, and an overall emphasis on flat vertical linearism.	Y
2	*The property has design value or physical value because it displays a high degree of craftsmanship or artistic merit.* *Rationale:*	Y

	The decorative design of the historic buildings reflects the importance of public infrastructure buildings in the early to mid-20th century. The buildings, notably the Filter Building, display a high degree of artistic merit in the architectural design and detailing including bas relief sculptures on the cornice and upper portion of the pilasters, decorative motifs and geometrical patterns, bronze doors, and decorative marble panels. In addition, the interior of the Filter Building has ornate design features including a marble double return stairway, brass railings and marble panelling.	
3	*The property has design value or physical value because it displays a high degree of technical or scientific merit.* *Rationale* The Lemieux Island Water Purification Plant represents a major, historical, technical achievement for the City of Ottawa. It was the first water treatment plant in Ottawa and gave residents access to clean drinking water, which reflects the progress of public health and sanitation in Ottawa during the mid-20th century. The new facility utilized a multi-step treatment process that included sedimentation, coagulation, sand filtration, and chlorination. At the time of its construction the plant had capacity to filter 35,000,000 gallons of water daily and was designed to accommodate future expansions that would allow for the ultimate capacity of 84,000,000 gallons.	Y
4	*The property has historical or associative value because it has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community.* **Rationale:** The Lemieux Island Water Purification Plant has historical value for its association with the establishment of a water supply system in Ottawa. Following typhoid outbreaks in 1911-1912, which were caused by pollution in the Ottawa river, the establishment of a clean water supply became a priority. It was the first water treatment plant in Ottawa	Y

	and gave residents access to clean drinking water, which reflects the progress of public health and sanitation in Ottawa during the mid-20th century.	
5	*The property has historical or associative value because it yields, or has the potential to yield, information that contributes to an understanding of a community or culture.*	N
6	*The property has historical or associative value because it demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.* **Rationale:** The building has associative value as a representative work by Gore, Nasmith, and Storrie, a consulting engineering firm who was responsible for designing and building several major Canadian water treatment plants through the late 1920s and into the 1930s, including the Hamilton Water Filtration Plant (1933), the Glenmore Filtration Plant (Calgary, 1930-1933), and the R.C. Harris Water Treatment Plant (Toronto, 1932-1941).	Y
7	*The property has contextual value because it is important in defining, maintaining or supporting the character of an area.* **Rationale:** The Lemieux Island Water Purification Plant is part of a series of historical water works facilities, including the Fleet Street Pumping Station and its aqueduct, the Hintonburg Pumping Station and the ring dam at Chaudière falls, that define the character of this portion of the Ottawa River. Together, these pieces of historic infrastructure form an industrial cultural heritage landscape that tells the story of water supply and treatment along this portion of the Ottawa river.	Y

8	*The property has contextual value because it is physically, functionally, visually or historically linked to its surroundings* **Rationale:** The buildings are functionally and historically linked to the surroundings and the Ottawa River as a water treatment facility that has remained in use since its construction.	Y
9	*The property has contextual value because it is a landmark.* **Rationale:** The Lemieux Island Water Purification Plant has contextual value as a notable landmark because of its prominent location, large size and bold architectural detailing. The view of the Water Purification Plant is unobstructed and is visible from the pedestrian and cycling paths that run along the both the Ontario and Quebec side of the river. The Chemical Building tower is an iconic element of the complex from a distance.	Y

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Document 5 Statement of Cultural Heritage Value

Description of Property - Lemieux Island Water Purification Plant, 1 Onigam Street

The Lemieux Island Water Purification Plant is a water treatment facility located on Lemieux Island in the Ottawa River, approximately two and a half kilometers west of Parliament Hill. The island is accessed by a bridge on the south shore of the Ottawa River, near the intersection of the Sir John A. Macdonald Parkway, Slidel Street and Onigam Street.

Lemieux Island is located within the traditional and unceded homeland of the Algonquin Anishinaabeg. The site is situated in the Kichi-Sìbì, immediately south of the Quebec Ontario border, and is approximately two kilometers west of the Chaudière Falls and five kilometers west of the Pasapkedjiwanong (now known as the Rideau River).

The historic core of the plant includes the Pumping Station, Chemical Building and Filter Building. The Pumping Station is a rectangular, two-and-a-half storey, flat-roofed, red brick industrial building constructed in 1917 and expanded in 1932. The Chemical Building is a single-storey building, with a four-storey tower, clad in red brick and limestone that was constructed in 1932. Constructed in 1932, the Filter Building is a four-storey building clad in limestone and red brick with a prominent north entrance.

Statement of Cultural Heritage Value or Interest

The Lemieux Island Water Purification Plant has design value as an excellent example of an industrial complex influenced by popular architectural styles of the early 20th century. Constructed 1915-1917, the Pumping Station is constructed in a vernacular Romanesque Revival style with Classical Revival influences, as illustrated in its use of masonry, prominent round-arched arcade windows and pedimented main entrance.

The Chemical Building and the Filter Building were both constructed in 1932 and illustrate the Art Deco Style which was popular in the 1920s and 1930s and often used in high-rises, commercial properties, banks and government buildings. The Art Deco influence in the Chemical Building is evident in the use of smooth finish building materials such as limestone blocks, vertical bands of stone that create a graphic pattern and carefully defined proportions in the two rectangular towers. The ornate Filter Building showcases the Art Deco style on its interior and exterior and typical of the Art Deco style, the Filter Building features a symmetrical façade, prominent front entrance

with recessed volumes, decorative motifs and geometrical patterns, bronze doors, and an overall emphasis on flat vertical linearism. The interior features materials commonly used in the Art Deco style, such as marble, terrazzo and bronze. The decorative design of the historic buildings on Lemieux Island reflects the prestige associated with public works buildings in the early 20th century.

The building has associative value as a representative work by Gore, Nasmith, and Storrie, a consulting engineering firm who was responsible for designing and building several major Canadian water treatment plants through the late 1920s and into the 1930s, including the Hamilton Water Filtration Plant (1933), the Glenmore Filtration Plant (Calgary, 1930-1933), and the R.C. Harris Water Treatment Plant (Toronto, 1932-1941).

The Lemieux Island Water Purification Plant has historical value for its association with the establishment of a water supply system in Ottawa. Following typhoid outbreaks in 1911-1912, which were caused by pollution in the city's water supply, the establishment of a clean water supply became a priority. At the time of its construction the plant had capacity to filter 35,000,000 gallons of water daily and was designed to accommodate future expansions that would allow for the ultimate capacity of 84,000,000 gallons. It was the first water treatment plant in Ottawa and it gave residents access to clean filtered drinking water, which reflects the progress of public health and sanitation in Ottawa during the mid-20th century.

The Lemieux Island Water Purification Plant has contextual value as a notable landmark because of its prominent location, large size and bold architectural detailing. The buildings are physically, functionally, and historically linked to their surroundings along the Ottawa River as a water treatment facility that has remained in use since its construction. The Lemieux Island Water Purification Plant is an integral component in a grouping of historical infrastructure along the Ottawa River that includes the Hintonburg Pumping Station, the Fleet Street Pumping Station and its aqueduct, and the ring dam at Chaudière falls. Together, these pieces of historic infrastructure form an industrial cultural heritage landscape treatment along this portion of the Ottawa river.

Description of Heritage Attributes

Pumping Station

The following attributes reflect the cultural heritage value of the Pumping Station as a good example of a vernacular Romanesque Revival design with Classical Revival influences applied to an industrial building:

- Two-and-a-half-storey massing
- Flat-roof
- Red brick cladding
- Symmetrical elevations
- Projecting metal cornice
- Eight round-arched windows on the north façade; three on the south façade, with three square windows above each
- Original main entrance at western façade with:
    - Stone, neo-classical portico
        - Triangular arched pediment
        - Plain tympanum and entablature
        - Four plain columns with Tuscan capitals
    - Large, round-arched window above entrance
    - Decorative marble panels
    - Seven small, square windows below cornice
- Round-arched entrance on east façade

The interior of the building is not included in the designation.

Chemical Building (1932)

The following attributes reflect the cultural heritage value of the Chemical Building as an excellent example of Art Deco design applied to an industrial building:

- Single-storey base
- Limestone cladding
- Four-storey tower with:
    - Two vertical masses

- Hipped roof on main tower
- Red brick cladding on main tower
- Flat roof on lower tower
- Alternating vertical bands on lower tower of limestone and red brick
- Three centred, symmetrical, vertical, thin windows per façade
- Square muntin patterns
- Limestone stringcourses on both towers
- Limestone diamond designs

The interior of the building is not included in the designation.

Filter Building

The following attributes reflect the cultural heritage value of the Filter Building as an excellent example of Art Deco design applied to an industrial building:

- Four-storey building
- Limestone and red brick cladding
- Copper roof
- Symmetrical front elevation with:
  - A prominent central window with grid mullions
  - A vertical rectangular massing, flanked by two recessed limestone pilasters and brick piers
  - A bas relief sculpture on the cornice and upper portion of pilasters
  - The presence of bronze doors of main entrance with geometric designs
  - Limestone first storey with three entrances and two small windows
- Bronze light fixtures
- Decorative stone detail over main entrance

- Narrow rectangular windows in the brick piers

The Filter Building features interior elements that embody the Art Deco style. The notable interior elements are primarily located in the filter gallery, and include:

- Interior Hauteville marble walls
- Roman Travertine flooring
- Marble double return stairway
- Brass railings
- Projecting marble cabinet with commemorative bronze plaque
- Operating gallery indicator and automatic signal lights
- Rosetta marble panel in filter gallery that conceals the heating units
- Italian valtournanche marble table with bronze loss of head and rate of flow instrument case
- Decorative pilasters
- Elevator, with brass cab
- The landscaped area to the west of the building notably the pond, stone retaining wall, and plantings.

The remainder of the interior of the building is excluded from the designation.

Later additions to the building are not included.