



**PUBLIC WORKS COMMITTEE
REPORT 22-012**

1:30 p.m.

Wednesday, August 10, 2022

Council Chambers

Hamilton City Hall

71 Main Street West

Present: Councillors N. Nann (Chair), R. Powers (Vice-Chair), J.P. Danko, J. Farr, L. Ferguson, T. Jackson, E. Pauls, M. Pearson and A. VanderBeek

Absent with Councillor S. Merulla – Personal
Regrets: Councillor T. Whitehead – Personal

**THE PUBLIC WORKS COMMITTEE PRESENTS REPORT 22-012 AND
RESPECTFULLY RECOMMENDS:**

**1. 2022 Mid-Term Report on Community Bookings at Tim Hortons Field
(PW18075(a)) (Ward 3) (Item 7.1)**

That Report PW18075(a), respecting the 2022 Mid-Term Report on Community Bookings at Tim Hortons Field, be received.

**2. Woodward Upgrades Construction Update (PW20043(c)) (City Wide)
(Item 7.2)**

That Report PW20043(c), respecting Woodward Upgrades Construction Update, be received.

**3. Claremont Access Wall Decommissioning and Rockfall Mitigation Works;
Walls 3, 4, and 4A (PW22062) (Ward 2 and 8) (Item 7.3)**

That Report PW22062, respecting Claremont Access Wall Decommissioning and Rockfall Mitigation Works; Walls 3, 4, and 4A, be received.

**4. Hamilton Wastewater Approvals Process Update (PW22069) (City Wide)
(Item 7.4)**

That Report PW22069, respecting Hamilton Wastewater Approvals Process Update, be received.

5. Intersection Control List (PW22001) (Wards 1, 2, 3, 4, 5) (Item 7.6)

That the appropriate By-law be presented to Council to provide traffic control as follows:

Intersection		Stop Control Direction		Class	Comments / Petition	Ward		
Street 1	Street 2	Existing	Requested					
Section “E” Hamilton								
(a)	Melvin Avenue	Shelby Avenue	WB	ALL		A	BW - RS Safety Review, Volumes warrant AWS conversion	4
	Connaught Avenue South	Main Street East	SB	SB		D	MAF – Housekeeping	3
	Balsam Avenue South	Main Street East	SB/NB	SB/NB		D	MAF – Housekeeping	3
	Leinster Avenue South	Main Street East		SB	SB	D	MAF – Housekeeping	3
	Prospect Street South	Main Street East		SB/NB	SB/NB	D	MAF – Housekeeping	3
	Melrose Avenue South	Main Street East		SB	SB	D	MAF – Housekeeping	3
	Albert Street	Main Street East		NB	NB	D	MAF – Housekeeping	3
	Spadina Avenue	Main Street East		SB	SB	D	MAF – Housekeeping	3
	Carrick Avenue	Main Street East		SB	SB	D	MAF – Housekeeping	3
	Barnesdale Boulevard	Main Street East		SB	SB	D	MAF – Housekeeping	3
	Ashford Boulevard	Main Street East		NB	NB	D	MAF – Housekeeping	3
	Fairholt Road South	Main Street East		SB	SB	D	MAF – Housekeeping	3

Intersection		Stop Control Direction		Class	Comments / Petition	Ward
Street 1	Street 2	Existing	Requested			
Blake Street	Main Street East	NB	NB	D	MAF – Housekeeping	3
Garfield Avenue South	Main Street East	SB	SB	D	MAF – Housekeeping	3
St. Claire Avenue	Main Street East	SB/NB	SB/NB	D	MAF – Housekeeping	3
Proctor Boulevard	Main Street East	SB	SB	D	MAF – Housekeeping	3
Eastbourne Avenue	Main Street East	NB	NB	D	MAF – Housekeeping	3
Holton Avenue South	Main Street East	SB/NB	SB/NB	D	MAF – Housekeeping	3
Burris Street	Main Street East	SB/NB	SB/NB	D	MAF – Housekeeping	3
Gladestone Avenue	Main Street East	NB	NB	D	MAF – Housekeeping	3
Myrtle Avenue	Main Street East	NB	NB	D	MAF – Housekeeping	3
Grant Avenue	Main Street East	SB/NB	SB/NB	D	MAF – Housekeeping	3
Ontario Avenue	Main Street East	NB	NB	D	MAF – Housekeeping	3
Erie Avenue	Main Street East	NB	NB	D	MAF – Housekeeping	3
Tisdale Street South	Main Street East	NB	NB	D	MAF – Housekeeping	3
West Avenue South	Main Street East	SB/NB	SB/NB	D	MAF – Housekeeping	3
Spring Street	Main Street East	NB	NB	D	MAF – Housekeeping	2
Ferguson Avenue South	Main Street East	SB	SB	D	MAF – Housekeeping	2
Bowen Street	Main Street East	NB	NB	D	MAF – Housekeeping	2
Ray Street South	Main Street West	SB/NB	SB/NB	D	MAF – Housekeeping	1

Intersection		Stop Control Direction		Class	Comments / Petition	Ward
Street 1	Street 2	Existing	Requested			
Margaret Street	Main Street West	SB	SB	D	MAF – Housekeeping	1
Poulette Street	Main Street West	NB	NB	D	MAF – Housekeeping	1
Strathcona Avenue South	Main Street West	SB	SB	D	MAF – Housekeeping	1
New Street	Main Street West	SB	SB	D	MAF – Housekeeping	1
Connaught Avenue North	King Street East	SB/NB	SB/NB	D	MAF – Housekeeping	3
Balsam Avenue North	King Street East	SB/NB	SB/NB	D	MAF – Housekeeping	3
Leinster Avenue South	King Street East	NB	NB	D	MAF – Housekeeping	3
Prospect Street South	King Street East	NB	NB	D	MAF – Housekeeping	3
Lottridge Street	King Street East	SB	SB	D	MAF – Housekeeping	3
Spadina Avenue	King Street East	NB	NB	D	MAF – Housekeeping	3
Carrick Avenue	King Street East	NB	NB	D	MAF – Housekeeping	3
Fairholt Road North	King Street East	SB/NB	SB/NB	D	MAF – Housekeeping	3
Garfield Avenue South	King Street East	SB/NB	SB/NB	D	MAF – Housekeeping	3
St. Clair Avenue	King Street East	NB	NB	D	MAF – Housekeeping	3
Proctor Boulevard	King Street East	NB	NB	D	MAF – Housekeeping	3
Gibson Avenue	King Street East	SB	SB	D	MAF – Housekeeping	3
Fairleigh Avenue North	King Street East	SB/NB	SB/NB	D	MAF – Housekeeping	3

Intersection		Stop Control Direction		Class	Comments / Petition	Ward	
Street 1	Street 2	Existing	Requested				
Burris Street	King Street East	NB	NB	D	MAF – Housekeeping	3	
Stirton Street	King Street East	SB	SB	D	MAF – Housekeeping	3	
Arthur Avenue North	King Street East	SB/NB	SB/NB	D	MAF – Housekeeping	3	
Grant Avenue	King Street East	NB	NB	D	MAF – Housekeeping	3	
Ashley Street	King Street East	SB	SB	D	MAF – Housekeeping	3	
Steven Street	King Street East	SB	SB	D	MAF – Housekeeping	3	
West Avenue North	King Street East	SB/NB	SB/NB	D	MAF – Housekeeping	3	
Spring Street	King Street East	NB	NB	D	MAF – Housekeeping	2	
Ferguson Avenue South	King Street East	SB/NB	SB/NB	D	MAF – Housekeeping	2	
Summers Lane	King Street West	NB	NB	D	MAF – Housekeeping	2	
Ray Street South	King Street West	SB/NB	SB/NB	D	MAF – Housekeeping	1	
Margaret Street	King Street West	NB	NB	D	MAF – Housekeeping	1	
Strathcona Avenue South	King Street West	NB	NB	D	MAF – Housekeeping	1	
New Street	King Street West	NB	NB	D	MAF – Housekeeping	1	
Section “F” Stoney Creek							
(a)	Collegiate Avenue	Mountain Avenue North	NB/SB	ALL	A	JD - RS safety review, volumes warrant AWS conversion	5

Legend

No Control Existing (New Subdivision) - **NC**

Intersection Class: **A** - Local/Local **B** - Local/Collector **C** - Collector/Collector
D - Local/Arterial

**6. Flooding and Drainage Improvement Framework (PW22071) (City Wide)
(Item 8.1)**

That Report PW22071, respecting Flooding and Drainage Improvement Framework, be received.

**7. Proposed Permanent Closure of a Portion of Chapple Street, Hamilton
(PW22067) (Ward 3) (Item 9.2)**

That the application of the City of Hamilton's Landscape Architectural Services Division to permanently close a portion of Chapple Street, Hamilton ("Subject Lands"), as shown on Appendix "A" & "B", to Public Works Committee Report 22-012, be approved, subject to the following conditions:

- (i) That the City Solicitor be authorized and directed to prepare all necessary by-laws to permanently close the highway, for enactment by Council;
- (ii) That the City Solicitor be authorized and directed to register a certified copy of the by-law(s) permanently closing the highway in the proper land registry office;
- (iii) That the City Solicitor be authorized to amend and waive such terms as they consider reasonable to give effect to this authorization and direction;
- (iv) That the Public Works Department publish any required notice of the City's intention to pass the by-laws to permanently close the highway pursuant to the City of Hamilton Sale of Land Policy By-law 14-204, if required; and
- (v) That the applicant be fully responsible for the deposit of a reference plan in the proper land registry office, and that said plan be prepared by an Ontario Land Surveyor to the satisfaction of the Manager, Geomatics and Corridor Management Section, and that the applicant also deposit a reproducible copy of said plan with the Manager, Geomatics and Corridor Management Section.

8. Blue Box Transition Update and Servicing (PW22064) (City Wide) (Item 10.1)

That the General Manager of Public Works, or designate, respond to Circular Material Ontario (CMO) indicating the City of Hamilton will not act as a service provider to deliver Blue Box collection on behalf of CMO during the Blue Box Transition period for Hamilton from April 1, 2025 to December 31, 2025.

**9. Main Street and King Street Automated Speed Enforcement (PW22066)
(Wards 1, 2, 3) (Item 10.2)**

- (a) That the four (4) proposed Automated Speed Enforcement (ASE) Program operating locations on Main Street and King Street, attached to Public Works Committee Report 22-012 as Appendix “C”, be approved for implementation in 2023; and
- (b) That the five (5) proposed Community Safety Zones (CSZ) on Main Street and King Street be approved for designation and Traffic By-Law 01-215 be amended accordingly, through passage of the amending by-law attached to Report (PW22066) as Appendix “B”.

10. Standardization of Wide Area Mowers (16-foot) (PW22068) (City Wide) (Item 10.3)

- (a) That the standardization of the Toro wide area 16-foot mower, pursuant to Procurement Policy #14 – Standardization, for the Parks and Cemeteries Section be approved until August 30, 2027;
- (b) That the General Manager of Public Works be authorized to negotiate, enter into and execute any required contract and any ancillary documents required to give effect thereto with Turf Care Products Canada Ltd., and in a form satisfactory to the City Solicitor; and
- (c) That the General Manager of Public Works be authorized to amend any contracts executed and any ancillary documents as required in the event that the supplier identified in (b) undergoes a name change or is replaced as the Ontario distributor of Toro products.

11. Dewitt Road Reconstruction and Cycling Infrastructure (Hamilton Cycling Committee – Citizen Committee Report) (Item 10.4)

- (a) That cycling lanes on Dewitt Road be physically protected, especially in front of the schools with precast or poured concrete curbs;
- (b) That cycling lanes be continued through intersections rather than end and restart before and after the roadway intersections;
- (c) That cycling lanes be continued past Hwy 8 to at least Midway Street;
- (d) That a pedestrian and cycling activated crosswalk be added to the Dewitt Road and Glenashton Crescent intersection nearest to St. Clare School;

- (e) That cycling lanes be connected to existing Hwy 8 lanes, and intersection be improved to provide space to cyclists; and
- (f) That the Hamilton Cycling Advisory Committee will draft a report to Public Works Committee regarding recommendations on Dewitt Road as it relates to cycling and active transportation that connects to cycling.

12. Safari Road Petition for Drainage Works and Appointment of a Drainage Engineer (PW22070) (Ward 13) (Item 10.5)

- (a) That the General Manager, Public Works or designate, be authorized to proceed with the drainage works to Safari Road between Kirkwall Road and Valens Road, as requested in the Petition for Drainage Works by Road Authority – Form 2, pursuant to the *Drainage Act*, R.S.O. 1990, c. D.17, subs. 4(1)(c), attached as Appendix “D” to Public Works Committee Report 22-012, received by Council on May 11, 2022; and
- (b) That Robinson Consulting be appointed as the Drainage Engineer under Section 8(1) of the *Drainage Act*, RSO, 1990 c.D.17., to be funded from 427400-55801 and that a preliminary report under Section 10(1) of the *Drainage Act*, RSO, 1990 c.D.17 be prepared by the appointed Drainage Engineer for consideration by Council before the end of May 2023.

13. City Hall Rear Door Mechanical Air Exhaust Relocation (PW22072) (Ward 2) (Item 10.6)

- (a) That the consultant report identified as “Project No 2022-0232-10 respecting Basement Mechanical Exhaust Air Feasibility study” (The WalterFedy Report)”, prepared by WalterFedy Integrated Design Firm, dated July 19th, 2022, attached as Appendix “E” to Public Works Committee Report 22-012, be received;
- (b) That Option # 2, of The WalterFedy Report, to relocate the exhaust air discharge louvers from the south entrance (ground floor), rear doors at Hamilton City Hall (“City Hall”) to the adjacent wall be approved; and
- (c) That a new Capital Project be set up and funded from the General Facility Capital Reserve #108039 to an upset limit amount of \$80,040 (HST not included) for the implementation of Option #2.

14. Appropriation Transfer of Funds – Southcote Road – Garner Road to Highway 403 Bridge (PW22063) (Ward 12) (Item 10.7)

- (a) That the General Manager of Public Works be authorized and directed to award Tender C15-19-22 (HSW) Southcote Road Reconstruction – Storm Sewer, Watermain, Roadway, Curb, Multi-Use Path and Sidewalk Reconstruction to GIP Paving Inc. (formerly Coco Paving Inc.) in the amount of \$13,323,000 (not including contingency and non-refundable HST) and that the General Manager of Public Works be authorized to execute, on behalf of the City of Hamilton, all agreements and other documents necessary to implement this award on confirmation that each such agreement be in a form satisfactory to the City Solicitor;
- (b) That the budget and financing plan for Southcote Road – Garner Road to Highway 403 Bridge storm sewer project (# 5182271328), totalling \$2,933,828, be amended and approved by an increase of \$1,774,200 from the Storm Sewer Capital Reserve #108010 as referenced in Appendix “F” to Public Works Committee Report 22-012;
- (c) That the budget and financing plan for Southcote Road – Garner Road to Highway 403 Bridge watermain project (# 5142171328), totalling \$3,200,000, be amended and approved by an increase of \$164,000 and that this increase be funded by the following transfers as referenced in Appendix “F” to Public Works Committee Report 22-012;
 - i) An additional \$51,640 from the Development Charge Reserve 110300;
 - ii) An additional \$30,360 from the Development Charge Reserve 110301;
 - iii) A capital budget appropriation of previously approved rate revenues of \$82,000 from the PW Capital Water Consumption Program project (#5142160711);
- (d) That the budget and financing plan for Southcote Road – Garner Road to Highway 403 Bridge road project (# 4032011028), totalling \$5,410,000, be amended and approved by an increase of by \$2,064,000 and that this increase be funded by the following transfers as referenced in Appendix “A” to Report PW22063;
 - i) An additional \$619,200 from the Development Charge Reserve 110306;
 - ii) An additional \$619,200 from the Development Charge Reserve 110307;

- iii) A capital budget appropriation of previously approved levy revenues of \$500,000 from the Contaminated Soil & Rock Disposal project (#4032114405); and
- iv) A capital budget appropriation of previously approved levy revenues of \$325,600 from the City-Wide Road Priorities project (#4031811017).

15. Capital Projects to Facilitate Light Rail Transit (LRT) (PW22073) (Wards 1, 2 and 3) (Item 10.8)

That funding for geotechnical investigations, design assignments, and subsurface utility investigation in the amount of \$550,000 in advance of the 2023 proposed project for Wilson – Victoria to Sherman (4032319109) be approved and that this increase be funded by the following transfers:

- (a) A capital budget appropriation of previously approved levy revenue of \$300,000 from the Wilson – Victoria to Sherman Two-Way Conversion project (#4662020012); and
- (b) An additional \$250,000 from the Unallocated Levy Reserve 108020.

16. Safety Enhancements on Wentworth Street North in Proximity to Cathy Wever Elementary School (Ward 3) (Item 11.1)

WHEREAS, Vision Zero and Complete Streets principles are used in the City of Hamilton to provide a safer environment for all road users;

WHEREAS, on June 17, 2022 a young pedestrian was struck on Wentworth Street North by the driver of a pick-up truck and sustained serious injuries; and

WHEREAS, the collision occurred on Wentworth Street North in-front of Cathy Wever Elementary School.

THEREFORE, BE IT RESOLVED:

- (a) That Transportation Operations & Maintenance staff review Wentworth Street North between Bristol Street and Cannon Street East to determine and undertake reasonable safety enhancements with an emphasis on pedestrian and school safety, including consideration for a speed limit reduction to 30 km/hr within the School Zone; and
- (b) That the Mayor and City Clerk be authorized and directed to execute any required agreement(s) and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

17. Contribution to the Commemorative Park Bench & Tree Program in Honour of Eristo Grandoni (Ward 3) (Item 11.2)

WHEREAS, the Environmental Services Division of Public Works offers a Commemorative Park Bench & Tree Program;

WHEREAS, the Commemorative Park Bench & Tree Program provides options to honour an individual or group by donating a bench or tree to a City park which allows for improvements to our parks and inspires community pride and a sense of place;

WHEREAS, the Commemorative Park Bench & Tree Program is operated at full cost recovery through the donations provided;

WHEREAS, Eristo Grandoni lived on Rosslyn Avenue South for 50 years in the same house where he was known for tending to his garden and helping out whenever needed in the local community; and

WHEREAS, a donation to the Commemorative Park Bench & Tree Program in Ward 3 requires funding approval.

THEREFORE, BE IT RESOLVED:

- (a) That a contribution to the Commemorative Park Bench & Tree Program be funded from the Ward 3 Special Capital Re-Investment Discretionary Fund (# 3302209300) for the purchase of a Bench and Plaque at Gage Park in honour of Eristo Grandoni, a long-time resident, with an upset limit of \$1,600, be approved; and
- (b) That the Mayor and City Clerk be authorized and directed to approve and execute any and all required agreements and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

18. Installation of Speed Cushions as a Traffic Calming Measure at Various Locations (Ward 7) (Item 11.3)

WHEREAS, residents have advocated for the installation of speed cushions on various roadways in Ward 7 to address roadway safety concerns as a result of speeding and cut-through traffic; and

WHEREAS, petitions were submitted by residents requesting the installation of speed cushions as a traffic calming measure.

THEREFORE, BE IT RESOLVED:

- (a) That Transportation and Operations Maintenance staff be authorized and directed to install up to four speed cushions as a traffic calming measure on the following roadways as part of the 2022 Traffic Calming Program's fall application, as follows:
 - (i) Edwina Place (one speed cushion)
 - a. between Berko Avenue to Lawson Street
 - (ii) Jessica Street (one speed cushion)
 - a. between Onyx Drive to Vineberg Drive
 - (iii) Crerar Drive (two speed cushions)
 - a. between Aquila Place to Luciano Court
 - b. between Timothy Place to Western Limit
 - (b) That Transportation and Operations Maintenance staff be authorized and directed to install up to two speed cushions as a traffic calming measure on the following roadways as part of the 2023 Traffic Calming Program's spring application, as follows:
 - (i) Bishopsgate Avenue (two speed cushions)
 - a. between Mohawk Road East to Lilacside Drive
 - b. between Lilacside Drive to Ranchdale Drive
 - (c) That all costs associated with the installation of traffic calming measures at these locations be funded from the Ward 7 Capital Re-Investment Reserve (#108057), to be completed under contract # C15-12-22 at an upset limit, including contingency, not to exceed \$42,000; and
 - (d) That the Mayor and City Clerk be authorized and directed to execute any required agreement(s) and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.
- 19. Enhanced Safety and Security Measures at John Rebecca Park, 76 John Street North, Hamilton (Beasley Neighbourhood) (Ward 2) (Item 11.4)**

WHEREAS, CCTV cameras installed in public parks where criminal acts occur have assisted, in partnership with other parallel reasonable security measures and as investigative tools for law enforcement, to mitigate the likelihood of reoccurrence and impact of the criminal behaviour to the property and its local community;

WHEREAS, John Rebecca Park, located at 76 John Street North in Hamilton, is a recently completed multi-million-dollar urban parkette that replaced a surface asphalt parking lot and received substantial public input on design to serve residents and visitors;

WHEREAS, John Rebecca Park has become an unsafe environment due to an increase in criminal acts that include but are not limited to theft of and vandalism to City property and adjacent properties and businesses, alcohol and drug use, physical altercations, violence, vulgar and offensive graffiti, wire and power theft, encampments, illegal dumping and excessive litter, human defecation and urination, harassment of staff and local businesses;

WHEREAS, City of Hamilton staff cannot ensure a safe play environment at John Rebecca Park;

WHEREAS, all City of Hamilton Staff with work assignments at John Rebecca Park must not attend to the work without the presence of the Hamilton Police Service, as further detailed in Appendix "A";

WHEREAS, many assets within the park such as fixed metal chairs and components of the spray pad have been repeatedly vandalized and stolen and due to the high cost to replace these items and likelihood of repeated damage they have not been replaced and will not be replaced until the vandalism and theft incidents are controlled;

WHEREAS, often, when individuals at John Rebecca Park are approached during multiple daily visits from the Hamilton Police Service, Municipal Law Enforcement, Various Health Outreach teams and City of Hamilton Encampment staff they refuse to welcome the help being offered;

WHEREAS, a recently planned festival for John Rebecca Park was relocated by request of the City of Hamilton Special Events Advisory Team (SEAT) due to the concern for public safety at the park; and

WHEREAS, adjacent businesses to the park have incurred substantially higher maintenance costs due to the same incidents that are occurring in the park and would benefit from support by the City to deal with the impacts on their properties.

THEREFORE, BE IT RESOLVED:

- (a) That following a project specific Privacy Impact Assessment on the use and application of CCTV technology, CCTV cameras be installed including all reasonable mitigating measures recommended through the Privacy Impact Assessment at John Rebecca Park, 76 John Street, Hamilton, at the upset limit of \$35,000, to be funded through the Ward 2 Area Rating Capital Reserve account # 108052 along with an annualized \$1,000 operating impact for PM maintenance;
- (b) That staff from Public works, with requested Hamilton Police Service assistance, be authorized and directed to meet with the businesses adjacent to John Rebecca Park, 76 John Street North, to work on a plan for reducing the negative impact to their properties and report back to Public Works Committee on these and any future measures that could be instituted along with the associated costs; and
- (c) That the General Manager of Public Works be authorized and directed to approve and execute all required agreements and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

20. Portable Toilets to Support Stoney Creek Little League (Ward 9) (Item 11.5)

WHEREAS, Stoney Creek Little League offers programming at various City Parks ball diamonds;

WHEREAS, not all parks have washroom facilities;

WHEREAS, the following locations programmed by Stoney Creek Little League do not have washroom facilities available: Cherry Heights Park, Albion Estates Park, Ferris Park, Green Acres Park and Paramount Park;

WHEREAS, Stoney Creek Little League has requested support for the provision of washrooms at the above listed locations; and

WHEREAS, additional funding for the rental and cleaning of accessible portable toilet(s) for the 2022 season until October 31, 2022 is required.

THEREFORE, BE IT RESOLVED:

- (a) That a maximum of \$4,050 of funding to be allocated from the Stoney Creek Capital Reserve - #108034, for the provision of accessible portable toilet(s) at Cherry Heights Park, Albion Estates Park, Ferris Park, Green Acres Park and Paramount Park to support Stoney Creek Little League, be approved; and

- (b) That the Mayor and City Clerk be authorized and directed to approve and execute all required agreements and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

21. Accessible Washroom Improvements at Victoria Park, 500 King Street West, Hamilton (Ward 1) (Item 11.6)

WHEREAS, the fieldhouse at Victoria Park, 500 King Street West, located in Ward 1 is owned by the City of Hamilton, maintained by the Facilities Operations & Maintenance Section of the Energy, Fleet & Facilities Management Division, Public Works, and programmed through the Recreation Division;

WHEREAS, many of the current fieldhouses in Ward 1 require lifecycle repair and accessibility upgrades;

WHEREAS, flexible community space will enhance all-season programming at Victoria Park and will draw more users to the Park; and

WHEREAS, a feasibility study was previously conducted for Victoria Park, which identified the need and ability to renovate the existing fieldhouse to provide winterized accessible washrooms to support the Park users.

THEREFORE, BE IT RESOLVED:

- (a) That Public Works Facilities staff be authorized and directed to utilize existing block funding in the Victoria Park Fieldhouse PID (4242109112) to retain a Prime Design Consultant to undertake detailed design of accessible washroom improvements at Victoria Park, 500 King Street West, Hamilton;
- (b) That the funding for the construction phase of the accessibility improvements to the washrooms at Victoria Park, 500 King Street West, Hamilton, at a cost, including contingency, not to exceed \$500,000, to be funded from the Ward 1 Capital Re-Investment Reserve (108051), be approved and added to the existing Victoria Park Fieldhouse PID (4242109112); and
- (c) That the Mayor and City Clerk be authorized and directed to execute any required agreement(s) and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

22. Installation of Acrylic Backboards for the Multi-Use Courts at Various Parks (Ward 2) (Item 11.7)

WHEREAS, it has been determined that clear acrylic basketball backboards are now acceptable for outdoor use in Hamilton;

WHEREAS, park improvements that have included an enhanced basketball and multi-court experience has been widely appreciated in the City's downtown, Ward 2; and

WHEREAS, improving the quality of outdoor basketball play further is desired by children, teens and adults in the community.

THEREFORE, BE IT RESOLVED:

- (a) That the purchase and installation of four sets of clear acrylic backboards for the multi-use and basketball court at Corktown Park, 175 Ferguson Avenue South, Central Park, 168 Bay Street North, Carter Park, 32 Stinson Street, and Eastwood Park, 111 Burlington Street East, at an upset limit, including contingency not to exceed \$30,000, to be funded from the Ward 2 Bell Tower funds account, be approved; and
- (b) That the Mayor and City Clerk be authorized and directed to approve and execute all required agreements and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

23. Accessibility Improvement to Captain Cornelius Park, 150 Mountbatten Drive, Hamilton (Ward 8) (Item 11.8)

WHEREAS, a new play structure and wood fibre safety surfacing was installed at Captain Cornelius Park, 150 Mountbatten Drive, Hamilton, in 2020;

WHEREAS, engineered wood fibre is the safety surfacing material that is installed as part of most play structure installations;

WHEREAS, wood fibre safety surfacing meets Ontario accessibility standards, however it may be a challenging surface for some residents to navigate depending on mobility devices and mobility levels;

WHEREAS, enhancements, such as the addition of rubber tiles within the play structure safety surfaces, promotes increased mobility to the play structure; and

WHEREAS, additional funding is required to support this accessibility improvement.

THEREFORE, BE IT RESOLVED:

- (a) That the installation of a rubber tile pathway placed through the wood fibre safety surfacing at Captain Cornelius Park, 150 Mountbatten Drive, Hamilton, to be funded from the Ward 8 Special Capital Re-Investment Reserve (#108058) at an upset cost of \$19,000 and from the Ward 8 Special Capital Re-Investment Discretionary Fund at an upset cost of \$5,000, be approved; and
- (b) That the Mayor and City Clerk be authorized and directed to approve and execute all required agreements and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

24. Safety Lighting, MacNab Street Tunnel (Ward 2) (Item 11.10)

WHEREAS, an increasing number of residents have shared their concerns respecting safety and security while traversing the MacNab Street Tunnel that connects MacNab Street and Hunter Street - Durand Neighbourhood; and

WHEREAS, as a response to these concerns, City staff recently studied the tunnel and surrounding area, finding lighting improvement opportunities to enhance the existing lighting levels.

THEREFORE, BE IT RESOLVED:

That staff from Transportation Operations & Maintenance be directed and authorized to proceed with implementing the lighting improvements in and around the MacNab Street Tunnel to the upset limit, including contingency, of \$5,000, to be funded from the Ward 2 Bell Tower funds account.

25. Installation of Speed Cushions as a Traffic Calming Measure on Whitney Avenue, Stanley Avenue, and Charlton Avenue (Ward 1) (Item 11.11)

WHEREAS, residents on Whitney Avenue, Stanley Avenue, and Charlton Avenue in Ward 1 have advocated for the installation of speed cushions to address roadway safety concerns as a result of speeding; and

WHEREAS, Vision Zero and Complete Streets principles are used in the City of Hamilton to provide a safer environment for all road users.

THEREFORE, BE IT RESOLVED:

- (a) That Transportation and Operations Maintenance staff be authorized and directed to install speed cushions as a traffic calming measure as part of the 2023 Traffic Calming Program's spring application, as follows:
 - (i) One speed cushion within the school zone on Whitney Avenue between Rifle Range Road and Leland Street;

- (ii) Two speed cushions on Stanley Avenue between Locke Street South and Queen Street South, to replace the two existing concrete speed humps;
- (iii) Two speed cushions on Charlton Avenue West between Locke Street South and Queen Street South, to replace the two existing concrete speed humps;
- (b) That all costs associated with the installation of the speed cushions on Whitney Avenue, Stanley Avenue, and Charlton Avenue be funded from the Ward 1 Special Capital Re-Investment Reserve (#108051) at an upset limit, including contingency, not to exceed \$42,000; and
- (c) That the Mayor and City Clerk be authorized and directed to execute any required agreement(s) and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

26. Community Safety and Complete Streets Report (Ward 1) (Item 11.12)

WHEREAS, the Ward 1 Office has requested a review of designated neighbourhoods with a focus on Traffic Calming Initiatives at problem locations and to provide a guideline for safety enhancements given the road width, classification, surrounding land use, proximity to schools/playgrounds, access roads from arterials, on-street parking and other considerations;

WHEREAS, Vision Zero principles are used in the City of Hamilton to provide a safer environment for all road users;

WHEREAS, the City of Hamilton has introduced the Complete Streets Manual to guide staff in their approach in considering the needs of road users of all ages and abilities and building streets that meet their needs, whether they are walking, cycling, taking transit, driving a private automobile, or delivering goods; and

WHEREAS, staff do not have the internal resources to provide a comprehensive report of all designated neighbourhoods in Ward 1.

THEREFORE, BE IT RESOLVED:

- (a) That staff be authorized and directed to retain a consultant to undertake a review of designated Ward 1 neighbourhoods with the intent of providing a Complete Streets report identifying areas of concerns and recommendations to provide a safer environment for all road users based on Vision Zero and Complete Streets principles, to be funded

from the Ward 1 Special Capital Re-investment (#108051) at an upset limit, including contingency, not to exceed \$150,000 as per the Purchasing Policy for Roster Assignments; and

- (b) That the Mayor and City Clerk be authorized and directed to execute any required agreement(s) and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

27. Spray Pad Redevelopment at Gourley Park, 142 Duncairn Crescent, Hamilton (Ward 8) (Item 11.13)

WHEREAS, Gourley Park has planned capital improvements for a spray pad replacement for 2023 and would benefit from additional funding to investigate additional park improvements to be added to the scope of work, which are currently unfunded; and

WHEREAS, these community amenities are valuable recreation opportunities for children, youth and families within the Ward 8 neighbourhoods.

THEREFORE, BE IT RESOLVED:

- (a) That \$80,000 of funding be allocated from the Ward 8 Area Rating Reserve (#108058), \$190,000 from the Ward 8 Discretionary Fund, and \$245,000 from the Ward 8 Minor Maintenance Fund to support the Gourley Park Spray Pad construction, and transferred to Landscape Architectural Services Section Project ID 4402256203 – Gourley Park Spray Pad Redevelopment, to support the spray pad reconstruction, be approved; and
- (b) That the General Manager of Public Works be authorized and directed to approve and execute any and all required agreements and ancillary documents, in a form satisfactory to the City Solicitor.

28. Improvements to Thorner Park, 100 Deerborn Drive, Hamilton (Ward 7) (Item 11.15)

WHEREAS, the play structure at Thorner Park, 100 Deerborn Drive, Hamilton, has reached the end of its usable life;

WHEREAS, the asphalt pathways at Thorner Park have deteriorated and would benefit from replacement; and

WHEREAS, there is a desire by the community to improve the park through upgrades of these amenities and to review opportunities for additional amenities that provide valuable recreation opportunities for children, youth and families

within Ward 7 neighbourhoods.

THEREFORE, BE IT RESOLVED:

- (a) That replacement of the existing play structure, including a rubberized safety surface, at Thorner Park, 100 Deerborn Drive, Hamilton, at an upset cost of \$350,000, to be funded from the Ward 7 Special Capital Re-Investment Reserve (#108057), be approved;
- (b) That existing park pathways in poor condition at Thorner Park, 100 Deerborn Drive, Hamilton, be replaced at an upset cost of \$150,000, to be funded by a transfer from the Ward 7 Minor Maintenance Fund 4031911607 to Thorner Park Improvements (#4242209707);
- (c) That any surplus funding from the replacement of the park pathways, be transferred back to the Ward 7 Minor Maintenance Fund (#4031911607);
- (d) That a park consultation and design process be undertaken with the community to review opportunities to provide additional recreational amenities at Thorner Park, 100 Deerborn Drive, Hamilton, at an upset cost of \$150,000 to be funded from the Ward 7 Special Capital Re-Investment Reserve (#108057), be approved; and
- (e) That the Mayor and City Clerk be authorized and directed to approve and execute any and all required agreements and ancillary documents, in a form satisfactory to the City Solicitor.

29. Installation and Removal of Speed Cushions as a Traffic Calming Measure on Broker Drive (Ward 6) (Added Item 11.16)

WHEREAS, residents on Broker Drive in Ward 6 have advocated for additional speed cushion locations to address roadway safety concerns as a result of speeding; and

WHEREAS, petitions representing 32 signatures were submitted by residents requesting the installation of additional speed cushions as a traffic calming measure.

THEREFORE, BE IT RESOLVED:

- (a) That Transportation and Operations Maintenance staff be authorized and directed to install up to two speed cushions as a traffic calming measure on Broker Drive between Mountain Brow Boulevard and Upper Kenilworth

Avenue as part of the 2022 Fall/Spring 2023 Traffic Calming Program's spring application;

- (b) That Transportation and Operations Maintenance staff be authorized and directed to remove one existing speed cushion on Broker Drive in order to facilitate adequate spacing of the two new speed cushions between Mountain Brow Boulevard and Upper Kenilworth Avenue as part of the 2023 Traffic Calming Program's spring application;
- (c) That all costs associated with the installation of two speed cushions and removal of one speed cushion on Broker Drive be funded by the Ward 6 Special Capital Re-Investment Reserve (#108056) at an upset limit, including contingency, not to exceed \$18,000.
- (d) That the Mayor and City Clerk be authorized and directed to execute any required agreement(s) and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

30. Installation of Speed Cushions as a Traffic Calming Measure on Wood Street East, Mary Street North, and Robinson Street (Ward 2) (Added Item 11.17)

WHEREAS, local residents have highlighted traffic issues adjacent to their homes and have requested speed cushions as a means of addressing these issues;

WHEREAS, the North End Traffic Management Plan (NETMP) has set an example across the City respecting neighbourhood pedestrian safety that features, but is not limited to 30km speed limits throughout the community, speed cushions, bump outs, reduced crossings, protected bike lanes, partial and full street closures and public park pathways and trails; and

WHEREAS, further enhancements to pedestrian safety continue to be requested and assessed.

THEREFORE, BE IT RESOLVED:

- (a) That Transportation and Operations Maintenance staff be authorized and directed to install three speed cushions as a traffic calming measure as part of the 2023 Traffic Calming Program's spring application, as follows:
 - (i) One speed cushion in front of 9 Wood Street East; and
 - (ii) One speed cushion on Mary Street North between Brock Street and Burlington Street;

- (iii) One speed cushion on Robinson Street between Bay Street South and Park Street South;
 - (b) That all costs associated with the installation of the speed cushions on Wood Street East, Mary Street North, and Robinson Street be funded from the Ward 2 Area Rating Capital Reserve (#108052) at an upset limit, including contingency, not to exceed \$21,000; and
 - (d) That the Mayor and City Clerk be authorized and directed to execute any required agreement(s) and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.
- 31. Replacement of Churchill Park Stairs, 145 Cline Avenue, Hamilton and Extension of Sidewalk on Kipling Road to the Park Stairs (Ward 1) (Added Item 11.18)**

WHEREAS, the park stairs at Kipling Road and Parkside Drive providing access to Churchill Park, 145 Cline Avenue, were in disrepair and removed for health and safety reasons;

WHEREAS, there is not an easy access point for residents at this side of the park to connect to the upper tier of the park;

WHEREAS, the sidewalk on Kipling Road stops at the last house on Kipling Road and did not connect pedestrians to the stairs;

WHEREAS, Churchill Park is a destination for passive recreation including walking, particularly during the COVID-19 Pandemic;

WHEREAS, the Churchill Park Master Plan was approved in 2014 and staff have been implementing the park upgrades in phases, with another phase being designed in 2022; and

WHEREAS, there are currently insufficient funds to replace the stairs.

THEREFORE, BE IT RESOLVED:

- (a) That the replacement of the stairs at Churchill Park, 145 Cline Avenue, at Kipling Road, and the extension of the sidewalk on Kipling Road to connect to the park stairs be funded from the Ward 1 Special Capital Re-Investment Reserve (108051) at an upset limit of, including contingency, not to exceed \$180,000, be approved; and
- (b) That the Mayor and City Clerk be authorized and directed to execute any required agreement(s) and ancillary documents, with such terms

and conditions in a form satisfactory to the City Solicitor.

32. Fencing Improvements at Fairgrounds Community Park (305 Fall Fair Way), Glanbrook Cemetery (4350 Binbrook Road), and Binbrook Park (2640 Regional Road 56) (Ward 11) (Added Item 11.19)

WHEREAS, Fairgrounds Community Park located at 305 Fall Fair Way, Glanbrook Cemetery located at 4350 Binbrook Road, and Binbrook Park located at 2640 Regional Road 56, provide important public amenities to Ward 11 residents and beyond;

WHEREAS, the existing frontage and flanking fencing of these locations has deteriorated and reached their end of life condition;

WHEREAS, replacement of the fencing at Fairgrounds Park and Glanbrook Cemetery would benefit from a 4-foot decorative fence replacement, as per existing fencing; and

WHEREAS, Binbrook Park is in need of replacement of the existing chain link fencing due to age and worn condition.

THEREFORE, BE IT RESOLVED:

- (a) That fencing improvements, for the following public spaces, including removals, supply and installations, to be funded from the Ward 11 Minor Maintenance Fund 4031911611, be approved:
 - (i) Fairgrounds Community Park located at 305 Fall Fair Way, with 4-foot decorative fencing, at a cost of \$115,000;
 - (ii) Glanbrook Cemetery located at 4350 Binbrook Road, with 4-foot decorative fencing, at a cost of \$90,000;
 - (iii) Binbrook Park located at 2640 Regional Road 56, with chain link fencing, at a cost of \$50,000; and
- (b) That the Mayor and City Clerk be authorized and directed to execute any required agreement(s) and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

33. Municipal Class Environmental Assessment for Safari Road, between Kirkwall Road and Valens Road (Ward 13) (Added Item 11.20)

WHEREAS, Safari Road, between Kirkwall Road and Valens Road, has been

repeatedly closed to traffic, or reduced to a single lane, due to flooding;

WHEREAS, Hamilton City Council unanimously declared a climate emergency that committed the municipality to prioritizing climate action and sustainability;

WHEREAS, the removal of unsafe conditions created by flooding and operation of Safari Road, between Kirkwall Road and Valens Road supports healthy lives, social development, economic opportunities and civic participation for all Hamilton residents;

WHEREAS, the City must honour its stated commitments to safety, accessibility, equity, mitigating the impact of climate change to create a healthier, more liveable and prosperous City;

WHEREAS, in order to address the flooding, the road will need to be raised and drainage improvements, such as new culverts, will have to be made as required;

WHEREAS, Public Works staff are planning to undertake a Municipal Class Environmental Assessment (EA) to determine the road and drainage improvements;

WHEREAS, the completion of an EA is a legislative requirement in order for Public Works to proceed with the mitigative construction works and maintenance needed to permanently reopen the road;

WHEREAS, Safari Road is a designated Truck Route and is an important transportation corridor;

WHEREAS, Safari Road plays a key role in the City's transportation network and as such, the EA should be initiated as soon as possible at an estimated cost of \$500,000; and

WHEREAS, the resurfacing of Brock - Concession 4 W to Safari (4032111021) under contract C15-53-21 is now complete, pending final payment, and the total surplus available due to favourable tender and unused contingency is \$1,016,000.

THEREFORE, BE IT RESOLVED:

- (a) That Public Works staff be directed to undertake a Schedule C Municipal Class Environmental Assessment (EA) project under the Municipal Engineers Association Municipal Class Environmental Assessment document (October 2000, as amended in 2007, 2011, and 2015) for Safari Road, between Kirkwall Road to Valens Road; and

- (b) That Project ID 4032219321 (Safari - Kirkwall to Valens) in the amount of \$500,000, to be funded by a transfer of \$500,000 from Brock - Concession 4 W to Safari Project (#4032111021), to fund the Schedule C Municipal Class Environmental Assessment Project for Safari Road, between Kirkwall Road and Valens Road, be approved.

34. Demolition of the Decommissioned Boat Launch at Confederation Beach Park, 200 Van Wagners Beach Road, Hamilton (Ward 5) (Added Item 11.21)

WHEREAS, on April 30, 2018, Council approved \$875,000, funded from the Unallocated Capital Levy Reserve (#108020) for shoreline protection works at Confederation Beach Park to address damaged shoreline areas from extreme storms in 2017 and 2018;

WHEREAS, shoreline repair works to stabilize immediate need areas have been completed and a balance of \$379,873 remains in the Project ID #4401855802 - Confederation Beach Shoreline Repair;

WHEREAS, additional funding from the Disaster Mitigation and Adaptation Fund (DMAF) program was secured through a successful project application to complete any future required shoreline protection upgrades including along Confederation Beach Park;

WHEREAS, removal of the decommissioned boat launch at Confederation Beach Park was not considered in the original shoreline protection works project; and

WHEREAS, DMAF-funded shoreline works are in the design stage with construction in future years and it is desired that the boat launch be removed immediately to avoid ongoing maintenance costs and damage from future storms that can lead to unsafe conditions.

THEREFORE, BE IT RESOLVED:

- (a) That the demolition of the decommissioned boat launch, located at Confederation Beach Park, 200 Van Wagners Beach Road, be funded from Project ID #4401855802 Confederation Beach Shoreline Repair that was previously funded from the Unallocated Capital Levy Reserve (#108020), be approved; and
- (b) That the Mayor and City Clerk be authorized and directed to approve and execute all required agreements and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

35. Sport Lighting Improvements at Hill Park Pickle Ball (465 East 16th Street) and Mohawk Sports Park (1100 Mohawk Road East) (Wards 6 and 7) (Added Item 11.22)

WHEREAS, a sport lighting condition assessment study was completed in 2021 for 13 City of Hamilton Parks;

WHEREAS, two of these locations have an overall rating of Fair/Good, but some individual lighting poles are in need of replacement due to wear and end of life;

WHEREAS, one lighting pole at Hill Park Pickle Ball, located at 465 East 16th Street, and four poles at the soccer fields at Mohawk Sports Park, located at 1100 Mohawk Road East, have been identified within the study for replacement; and

WHEREAS, Capital funding from the Parks & Cemeteries block is not available to address the replacement of these poles.

THEREFORE, BE IT RESOLVED:

- (a) That funds for the replacement of lighting poles at the following locations be funded through a transfer of \$70,000 from the Parks Operating budget to the Parks Capital budget:
 - (i) One lighting pole at Hill Park Pickle Ball, located at 465 East 16th Street;
 - (ii) Four lighting poles at the soccer fields at Mohawk Sports Park located at 1100 Mohawk Road East; and
- (b) That the Mayor and City Clerk be authorized and directed to approve and execute all required agreements and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

FOR INFORMATION:

(a) APPROVAL OF AGENDA (Item 2)

The Committee Clerk advised of the following changes to the agenda:

5. COMMUNICATIONS

- 5.1 Correspondence from Laura Palumbo respecting Public Safety and the Design of City Streets and Intersections

Recommendation: Be Received.

- 5.2 Correspondence from Jamie Philp Respecting Making the City Safer for Pedestrians and Cyclists

Recommendation: Be Received.

11. MOTIONS

- 11.9 Financial Support for Waste Management Development and Consulting Fees for Relocation of Garbage Dumpsters on the CityHousing Hamilton Property at 45 Montcalm Drive, Hamilton (Ward 8) – WITHDRAWN - (to be presented as a Notice of Motion at the August 11 Emergency and Community Services Committee Meeting)

12. NOTICES OF MOTION

- 12.1 Installation and Removal of Speed Cushions as a Traffic Calming Measure on Broker Drive (Ward 6)
- 12.2 Installation of Speed Cushions as a Traffic Calming Measure on Wood Street East, Mary Street North, and Robinson Street (Ward 2)
- 12.3 Replacement of Churchill Park Stairs, 145 Cline Avenue, Hamilton and Extension of Sidewalk on Kipling Road to the Park Stairs (Ward 1)
- 12.4 Fencing Improvements at Fairgrounds Community Park (305 Fall Fair Way), Glanbrook Cemetery (4350 Binbrook Road), and Binbrook Park (2640 Regional Road 56) (Ward 11)
- 12.5 Municipal Class Environmental Assessment for Safari Road, between Kirkwall Road and Valens Road (Ward 13)
- 12.6 Demolition of the Decommissioned Boat Launch at Confederation Beach Park, 200 Van Wagners Beach Road, Hamilton (Ward 5)
- 12.7 Sport Lighting Improvements at Hill Park Pickle Ball (465 East 16th Street) and Mohawk Sports Park (1100 Mohawk Road East) (Wards 6 and 7)

The agenda for the August 10, 2022 Public Works Committee meeting was approved, as amended.

(b) DECLARATIONS OF INTEREST (Item 3)

There were no declarations of interest.

(c) APPROVAL OF MINUTES OF PREVIOUS MEETING (Item 4)

(i) July 6, 2022 (Item 4.1)

The Minutes of the July 6, 2022 meeting of the Public Works Committee were approved, as presented.

(d) COMMUNICATIONS (Item 5)

The following Communication Items, were received:

- (i) Correspondence from Laura Palumbo respecting Public Safety and the Design of City Streets and Intersections (Item 5.1)
- (ii) Correspondence from Jamie Philp Respecting Making the City Safer for Pedestrians and Cyclists (Item 5.2)

(e) CONSENT ITEMS (Item 7)

(i) Various Advisory Committee Minutes (Item 7.5)

The following Consent Items were received:

- (i) Hamilton Cycling Committee Minutes – June 1, 2022 (Item 7.5(a))
- (ii) Waste Management Advisory Committee Meeting Minutes – March 31, 2022 (Item 7.5(b))
- (iii) Keep Hamilton Clean and Green Advisory Committee (Item 7.5(c))
 - (1) February 15, 2022 (Item 7.5(c)(a))
 - (2) April 16, 2022 (Item 7.5(c)(b))

(f) STAFF PRESENTATIONS (Item 8)

(i) Flooding and Drainage Improvement Framework (PW22071) (City Wide) (Item 8.1)

Mark Bainbridge, Director Water & Waste Water Planning and Capital, and Chris Hamel, BluePlan Engineering Limited, provided Committee with a

presentation respecting the City's Flooding and Drainage Improvement Framework, with the aid of a PowerPoint Presentation.

The presentation respecting Flooding and Drainage Improvement Framework (PW22071), was received.

For further disposition of this matter, refer to Item 6.

(g) PUBLIC HEARINGS / DELEGATIONS (Item 9)

(i) John Kozlowski respecting Monuments at East Lawn Cemetery (approved on May 30, 2022) (Item 9.1)

John Kozlowski addressed Committee respecting monuments at East Lawn Cemetery with the aid of a PowerPoint presentation.

The delegation from John Kozlowski respecting Monuments at East Lawn Cemetery, was received.

(i) Proposed Permanent Closure of a Portion of Chapple Street, Hamilton (PW22067) (Ward 3) (Item 9.2)

Councillor Nann advised that the notice of the Proposed Permanent Closure of a Portion of Chapple Street, Hamilton was provided as required under the City's By-law No. 14-204 – the Sale of Land Policy By-law.

The Committee Clerk advised that there were no registered speakers.

The Chair asked three times if there were any members of the public in attendance who wished to come forward to speak to the matter. No individuals came forward.

The public meeting closed.

For further disposition of this matter, refer to Item 7.

(h) MOTIONS (Item 11)

Councillor Nann relinquished the Chair to Councillor Powers in order to introduce the following Motions:

(i) Safety Enhancements on Wentworth Street North in Proximity to Cathy Wever Elementary School (Ward 3) (Item 11.1)

For disposition of this matter, refer to Item 16.

(ii) **Contribution to the Commemorative Park Bench & Tree Program in Honour of Eristo Grandoni (Ward 3) (Item 11.2)**

For disposition of this matter, refer to Item 17.

Councillor Nann assumed the Chair for the remainder of the meeting.

(iii) **Spray Pad Redevelopment at Gourley Park, 142 Duncairn Crescent, Hamilton (Ward 8) (Item 11.13)**

WHEREAS, Gourley Park has planned capital improvements for a spray pad replacement for 2023 and would benefit from additional funding to investigate additional park improvements to be added to the scope of work, which are currently unfunded; and

WHEREAS, these community amenities are valuable recreation opportunities for children, youth and families within the Ward 8 neighbourhoods.

THEREFORE, BE IT RESOLVED:

- (a) That \$325,000 of funding be reallocated from the Ward 8 Special Capital Re-Investment Reserve (#108058), and \$190,000 from the Ward 8 Capital Discretionary Fund, to support the Gourley Park Spray Pad construction, and transferred to Landscape Architectural Services Section Project ID 4402256203 – Gourley Park Spray Pad Redevelopment, to support the spray pad reconstruction, be approved; and
- (b) That the General Manager of Public Works be authorized and directed to approve and execute any and all required agreements and ancillary documents, in a form satisfactory to the City Solicitor.

Sub-section (a) of the Motion respecting Spray Pad Redevelopment at Gourley Park, 142 Duncairn Crescent, Hamilton was **amended** by deleting the funding sources in entirety and replacing with the following:

- (a) That ~~\$325,000 of funding be reallocated from the Ward 8 Special Capital Re-Investment Reserve (#108058), and \$190,000 from the Ward 8 Capital Discretionary Fund,~~ **\$80,000 of funding be allocated from the Ward 8 Area Rating Reserve (#108058), \$190,000 from the Ward 8 Discretionary Fund, and \$245,000 from the Ward 8 Minor Maintenance Fund** to support the Gourley Park Spray Pad construction, and transferred to

Landscape Architectural Services Section Project ID 4402256203
– Gourley Park Spray Pad Redevelopment, to support the spray
pad reconstruction, be approved; and

For disposition of this matter, refer to Item 27.

(iv) Funding to Support the National Softball Association and Buchanan Women's Softball League for User Fees (Wards 7 and 8) (Item 11.14)

WHEREAS, the National Softball Association and Buchanan Women's Softball League offer programming to City of Hamilton residents at various City parks;

WHEREAS, these leagues bring in revenue to the City of Hamilton in tourism dollars;

WHEREAS, these groups also program dedicated community events and tournaments, such as the National Softball Association Nationals and Buchanan Softball Fundraising events;

WHEREAS, user fees are required for the City of Hamilton to support events and tournaments within parks; and

WHEREAS, the National Softball Association and Buchanan Women's Softball League are seeking additional funding to assist with user fees for their tournament costs.

THEREFORE, BE IT RESOLVED:

- (a) That a maximum of \$1,200 of funding, to be allocated from the Ward 7 Capital Re-Investment Discretionary Fund, to support the National Softball Association and Buchanan Women's Softball League for user fees for their events and tournament, be approved;
- (b) That a maximum of \$500 of funding, to be allocated from the Ward 8 Capital Re-Investment Discretionary Fund, to support the National Softball Association and Buchanan Women's Softball League for user fees for their events and tournament, be approved; and
- (c) That the Mayor and City Clerk be authorized and directed to approve and execute all required agreements and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

The Motion respecting Funding to Support the National Softball Association and Buchanan Women's Softball League for User Fees (Wards 7 and 8), was referred to the August 12, 2022 meeting of Council in order for Finance and Clerks staff to provide clarity on the rules respecting a Councillor's use of City funds to sponsor events subsequent to the beginning of the Nomination Period during an election year.

(i) NOTICES OF MOTION (Item 12)

(i) Installation and Removal of Speed Cushions as a Traffic Calming Measure on Broker Drive (Ward 6) (Item 12.1)

The Rules of Order were waived to allow for the introduction of a Motion respecting Installation and Removal of Speed Cushions as a Traffic Calming Measure on Broker Drive (Ward 6).

WHEREAS, residents on Broker Drive in Ward 6 have advocated for additional speed cushion locations to address roadway safety concerns as a result of speeding; and

WHEREAS, petitions representing 32 signatures were submitted by residents requesting the installation of additional speed cushions as a traffic calming measure.

THEREFORE, BE IT RESOLVED:

- (a) That Transportation and Operations Maintenance staff be authorized and directed to install up to two speed cushions as a traffic calming measure on Broker Drive between Mountain Brow Boulevard and Upper Kenilworth Avenue as part of the 2023 Traffic Calming Program's spring application;
- (b) That Transportation and Operations Maintenance staff be authorized and directed to remove one existing speed cushion on Broker Drive in order to facilitate adequate spacing of the two new speed cushions between Mountain Brow Boulevard and Upper Kenilworth Avenue as part of the 2023 Traffic Calming Program's spring application;
- (c) That all costs associated with the installation of two speed cushions and removal of one speed cushion on Broker Drive be funded by the Ward 6 Special Capital Re-Investment Reserve (#108056) at an upset limit, including contingency, not to exceed \$18,000.

- (d) That the Mayor and City Clerk be authorized and directed to execute any required agreement(s) and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor.

Sub-section (a) of the Motion respecting Installation and Removal of Speed Cushions as a Traffic Calming Measure on Broker Drive (Ward 6), was **amended**, by adding the words ***“Fall 2022/Spring”***, to read as follows:

- (a) That Transportation and Operations Maintenance staff be authorized and directed to install up to two speed cushions as a traffic calming measure on Broker Drive between Mountain Brow Boulevard and Upper Kenilworth Avenue as part of the ***Fall 2022/Spring*** 2023 Traffic Calming Program’s spring application;

For disposition of this matter, refer to Item 29.

(ii) Installation of Speed Cushions as a Traffic Calming Measure on Wood Street East, Mary Street North, and Robinson Street (Ward 2) (Item 12.2)

The Rules of Order were waived to allow for the introduction of a Motion respecting Installation of Speed Cushions as a Traffic Calming Measure on Wood Street East, Mary Street North, and Robinson Street (Ward 2).

For disposition of this matter, refer to Item 30.

(iii) Replacement of Churchill Park Stairs, 145 Cline Avenue, Hamilton and Extension of Sidewalk on Kipling Road to the Park Stairs (Ward 1) (Item 12.3)

The Rules of Order were waived to allow for the introduction of a Motion respecting Replacement of Churchill Park Stairs, 145 Cline Avenue, Hamilton and Extension of Sidewalk on Kipling Road to the Park Stairs (Ward 1).

For disposition of this matter, refer to Item 31.

(iv) Fencing Improvements at Fairgrounds Community Park (305 Fall Fair Way), Glanbrook Cemetery (4350 Binbrook Road), and Binbrook Park (2640 Regional Road 56) (Ward 11) (Item 12.4)

The Rules of Order were waived to allow for the introduction of a Motion respecting Fencing Improvements at Fairgrounds Community Park (305 Fall Fair Way), Glanbrook Cemetery (4350 Binbrook Road), and Binbrook Park (2640 Regional Road 56) (Ward 11).

For disposition of this matter, refer to Item 32.

(v) Municipal Class Environmental Assessment for Safari Road, between Kirkwall Road and Valens Road (Ward 13) (Item 12.5)

The Rules of Order were waived to allow for the introduction of a Motion respecting Municipal Class Environmental Assessment for Safari Road, between Kirkwall Road and Valens Road (Ward 13).

For disposition of this matter, refer to Item 33.

(vi) Demolition of the Decommissioned Boat Launch at Confederation Beach Park, 200 Van Wagners Beach Road, Hamilton (Ward 5) (Item 12.6)

The Rules of Order were waived to allow for the introduction of a Motion respecting Demolition of the Decommissioned Boat Launch at Confederation Beach Park, 200 Van Wagners Beach Road, Hamilton (Ward 5).

For disposition of this matter, refer to Item 34.

(vii) Sport Lighting Improvements at Hill Park Pickle Ball (465 East 16th Street) and Mohawk Sports Park (1100 Mohawk Road East) (Wards 6 and 7) (Item 12.7)

The Rules of Order were waived to allow for the introduction of a Motion respecting Sport Lighting Improvements at Hill Park Pickle Ball (465 East 16th Street) and Mohawk Sports Park (1100 Mohawk Road East) (Wards 6 and 7).

For disposition of this matter, refer to Item 35.

(viii) Totem Pole that was Located at Confederation Beach Park (200 Van Wagners Beach Road) (Ward 5) (Added Item 12.8)

Councillor Farr introduced the following Notice of Motion:

WHEREAS, the Totem Pole that was located in Confederation Beach Park (200 Van Wagners Beach Road), was damaged in a wind storm in 2011;

WHEREAS, attempts to contact the Totem Pole's Indigenous makers in British Columbia have been unsuccessful; and

WHEREAS, Hamilton Conservation Authority staff are in the process of transferring the Totem Pole to City of Hamilton staff.

THEREFORE, BE IT RESOLVED:

That staff be directed to prepare a restoration and installation plan for the Totem Pole that was located at Confederation Beach Park (200 Van Wagners Beach Road), in consultation with Hamilton's Indigenous community.

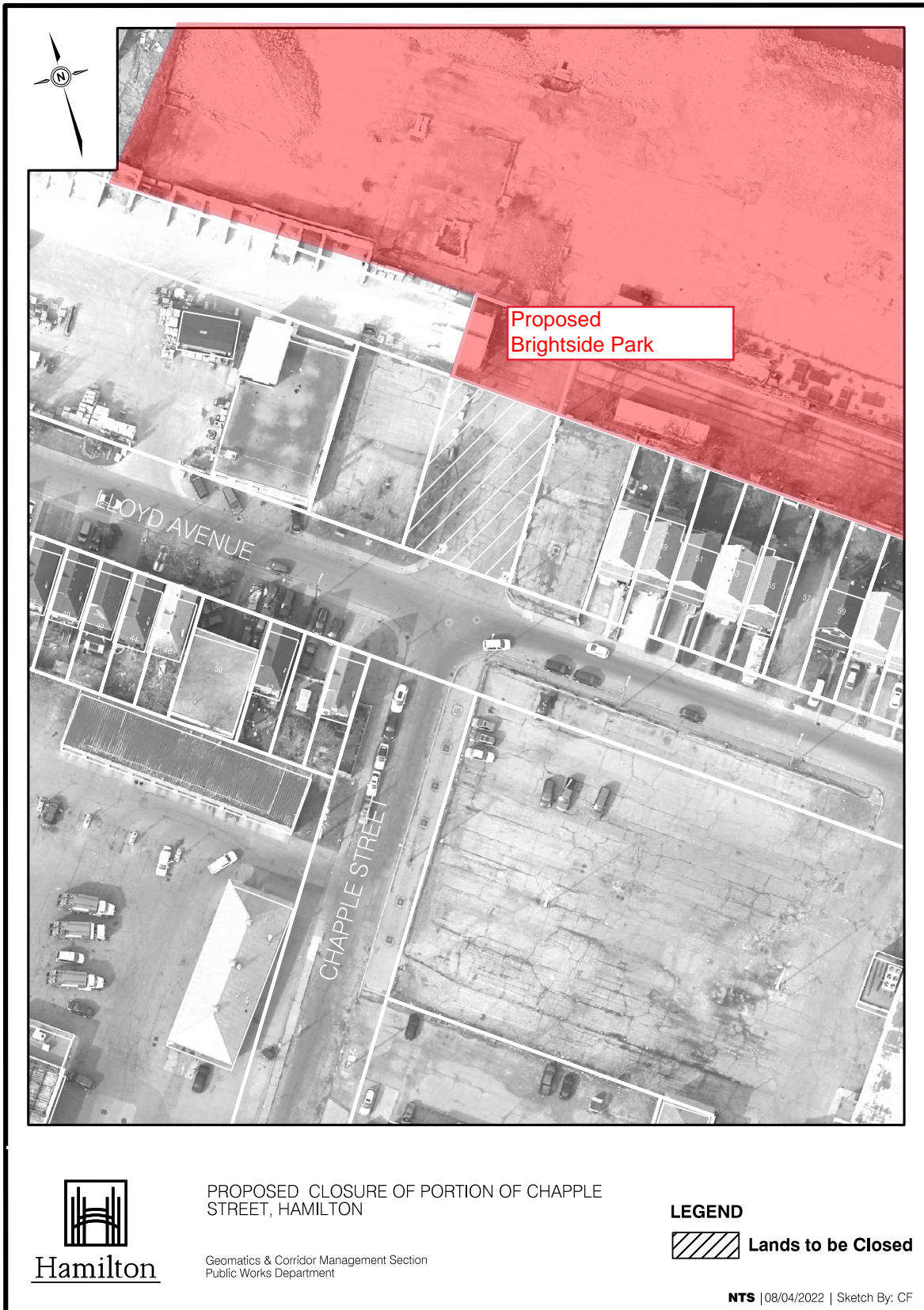
(j) ADJOURNMENT (Item 15)

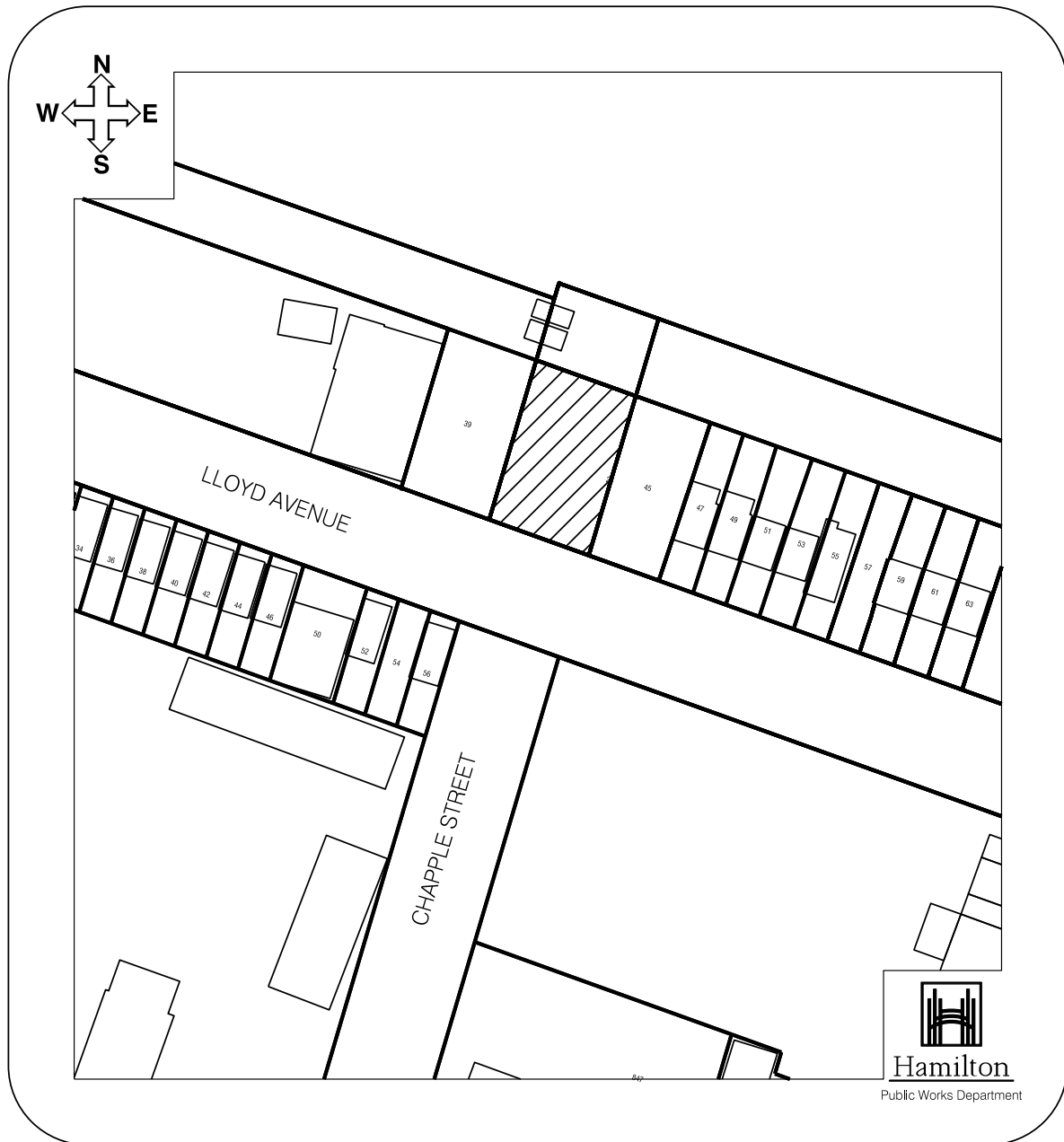
There being no further business, the meeting adjourned at 5:13 p.m.

Respectfully submitted,

Councillor N. Nann, Chair,
Public Works Committee

Carrie McIntosh
Legislative Coordinator
Office of the City Clerk





LOCATION PLAN

PROPOSED CLOSURE OF
PORTION OF
**CHAPPLE STREET,
HAMILTON**

CITY OF HAMILTON
PUBLIC WORKS DEPARTMENT

LEGEND



SUBJECT LANDS

DATE: April 8, 2022

Not to Scale | Sketch By: CF

REFERENCE FILE NO : PW22__

City of Hamilton
Automated Speed Enforcement (ASE) Deployment Interim Schedule - 2023

Location	Ward	Zone Type	"Coming Soon" Sign Installation Date	ASE Operation Date
Main Street East - Gage Avenue South to King Street East	3	Community Safety Zone	October 2022	January 2023
King Street West - Lock Street South to Dundurn Street South	1	Community Safety Zone		
Main Street West - Dundurn Street South to Queen Street South	1	Community Safety Zone	December 2022	March 2023
King Street East - Gage Avenue South to Lottridge Street	3	Community Safety Zone		



Ministry of Agriculture,
Food and Rural Affairs

Petition for Drainage Works by Road Authority – Form 2

Drainage Act, R.S.O. 1990, c. D.17, subs. 4(1)(c)

To: The Council of the Corporation of the City of Hamilton

Re: Road name and road location (provide description of road or section of road that requires drainage)
Safari Road in the area of 1759 and 1727 is experiencing flooding and water over the road.

I, Sniuolis, Peter, as an individual having jurisdiction over
(Last, first name)

the above road system for the City of Hamilton

declare that the road described above requires drainage and hereby petition under subsection 4(1)(c) of the *Drainage Act* that this area be drained by means of a drainage works.

Organization

City of Hamilton

Position Title

Manager, Roadway Maintenance

Signature

Date (yyyy/mm/dd)

2022/04/08

Petitioners become financially responsible as soon as they sign a petition:

- Once the petition is accepted by council, an engineer is appointed to respond to the petition. *Drainage Act*, R.S.O. 1990, c. D. 17 subs. 8(1).
- After the meeting to consider the preliminary report, if the petition does not comply with section 4, the project is terminated and the road authority is responsible for the costs. *Drainage Act*, R.S.O. 1990, c. D. 17 subs. 10(4).
- After the meeting to consider the final report, if the petition does not comply with section 4, the project is terminated and the road authority is responsible for the costs. *Drainage Act*, R.S.O. 1990, c. D. 17 s. 43.
- If the project proceeds to completion, a share of the cost of the project will be assessed to the involved properties in relation to the assessment schedule in the engineer's report, as amended on appeal. *Drainage Act*, R.S.O. 1990, c. D. 17 s. 61.

[Print Form](#)

[Clear Form](#)



HAMILTON CITY HALL

BASEMENT MECHANICAL EXHAUST AIR FEASIBILITY STUDY

Project No.: 2022-0232-10

July 19, 2022

WALTERFEDY

HAMILTON CITY HALL

BASEMENT MECHANICAL EXHAUST AIR Feasibility Study

Table of Contents

	Page
EXECUTIVE SUMMARY	1
1.0 INTRODUCTION.....	2
2.0 EXISTING CONDITIONS.....	2
3.0 REVIEW	2
3.1 Option #1.....	2
3.2 Option #2.....	4
3.3 Option #3.....	7
4.0 COST SUMMARY.....	9
4.1 Opinion of Probable Construction Costs.....	9
5.0 ENERGY REPORT	11
5.1 Background.....	11
5.2 Scope of Work.....	11
5.3 Contact Information	11
5.4 Facility Description Methodology	11
5.5 Facility Overview	12
5.6 Occupancy Schedule.....	12
5.7 Air Distribution	12
5.8 Utility Baseline Analysis Methodology	13
5.9 Utility Baseline Analysis Assumptions	13
5.10 Utility Use Baseline	13
5.11 Measures Analysis Methodology	16
5.12 Measure Analysis Assumption.....	16
5.13 Measures Considered but Not Analyzed	17
5.14 Occupancy Schedule Optimization	17
5.15 Run Around Loop.....	18
5.16 Recommendations	19
5.17 Glossary.....	20

EXECUTIVE SUMMARY

The City of Hamilton has engaged WalterFedy to investigate the feasibility of relocating the location of the exhaust air from the basement mechanical room. The current location at the ground floor level at the south entrance has created challenges during the past two winter seasons.

This study considered three options to re-direct and relocate the exhaust air discharge location as follows:

Option #1: Extend ducts from the top of current duct shafts up through Level 2 with exposed stainless steel ductwork. Costs include premium time for construction.
Opinion of Costs: \$140,760

Option #2: Install new exhaust air louvres at the south side of the existing duct shafts. Air will be discharged beneath the bridge to the Hunter St. parking lot. Costs include premium time for construction
Opinion of Costs: \$80,040

Option #3: Extend new exhaust ducts from shaft to the south at underside of bridge. Provide louvres to discharge air to the east and west directions at high-level. New ductwork to be encased in metal cladding to match underside of bridge. Costs include premium time for construction
Opinion of Costs: \$216,660

As part of our review of the exhaust air systems from the Basement we reviewed options for energy recovery. A heat recovery run-around loop was evaluated to transfer heat from the exhaust air stream to pre-heat the outdoor air for the air handling units in the Basement Mechanical Room. The pay back for this installed was determined to be 6.8 years. Our report also reviews the impact of implementing an occupancy schedule for HVAC systems as all air handling units and exhaust fans are operating 24/7 according to the data provided. The implementation of occupancy schedules through the BAS has a significant energy reduction for very little cost and a payback of under 1 year.

1.0 INTRODUCTION

WalterFedy has been retained by the City of Hamilton to review alternate locations for the exhaust air discharge from the basement mechanical room.

The existing location at the south doors at ground floor level has created challenges during the past two winter seasons, by discharging warm exhaust air beneath the overhang.

Our team reviewed the mechanical drawings prepared by Group Eight Engineering Ltd., dated January 2009, and completed a site review of the existing installation with city staff.

2.0 EXISTING CONDITIONS

The two existing air louvres are approximately 10'x10' in size and are original to the building construction in 1960. During the renovation of the building in 2009 and 2010, these louvres were maintained and re-used and designated as a heritage feature of the building.

Located behind each louver is a large duct of approximately 25 SF that rises up from the Basement Mechanical Room.

The air exhausted from these louvers is a combination of air from exhaust fans EF 1, 2, 5 and return air fans RF 2, 4.

The total volume of air to be exhausted from each louver at peak capacity is:

- East Side: 38,100 CFM
- West Side: 32,600 CFM

All options to re-route the exhaust air will also include blanking off the existing louvers from behind and leaving the existing louvers in place to maintain the current appearance.

3.0 REVIEW

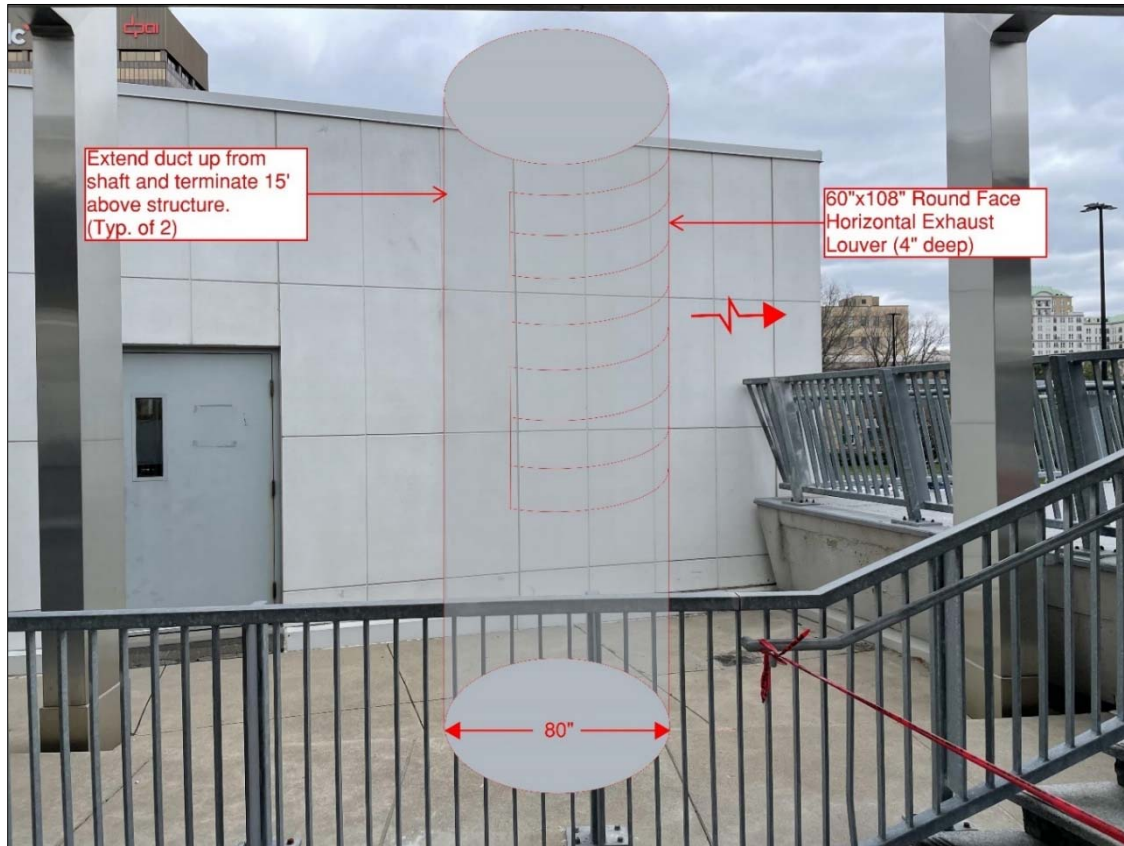
3.1 Option #1

Part of our review to determine an alternate route for the exhaust duct combining the exhaust systems into one shaft at either the east or west side. This would require running large ducts through the centre area of the basement mechanical room.

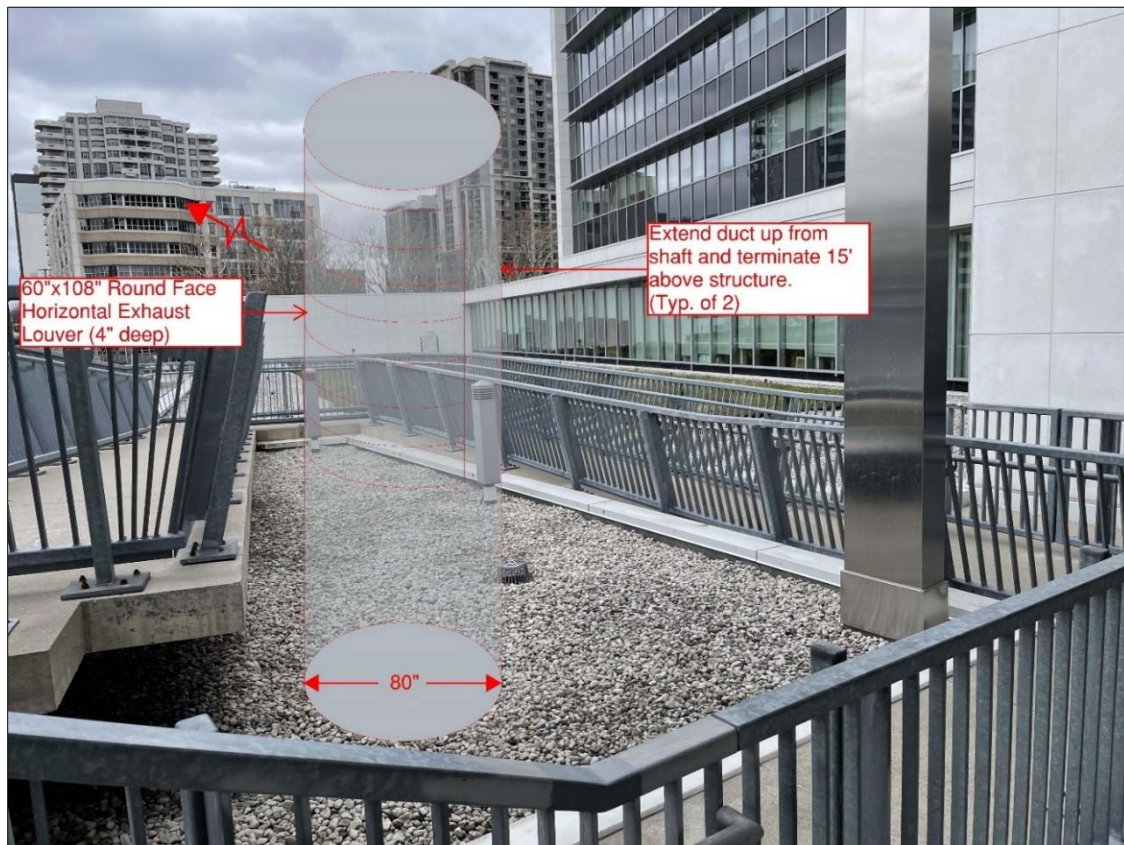
Unfortunately, this approach is not possible due to the existing piping and pumps installed in this area. All of the pipes and equipment would need to be relocated and re-worked in order to create sufficient space for additional duct work within the basement mechanical room. This would add significant cost and impact to building operations.

Option #1 is based on extending a free-standing duct up through the top of the existing shaft by using a round stainless-steel duct. The duct would be heavy gauge steel with circular louver to discharge air (Refer to Figure B). Cutting and patching of the "roof" would be required as part of the work.

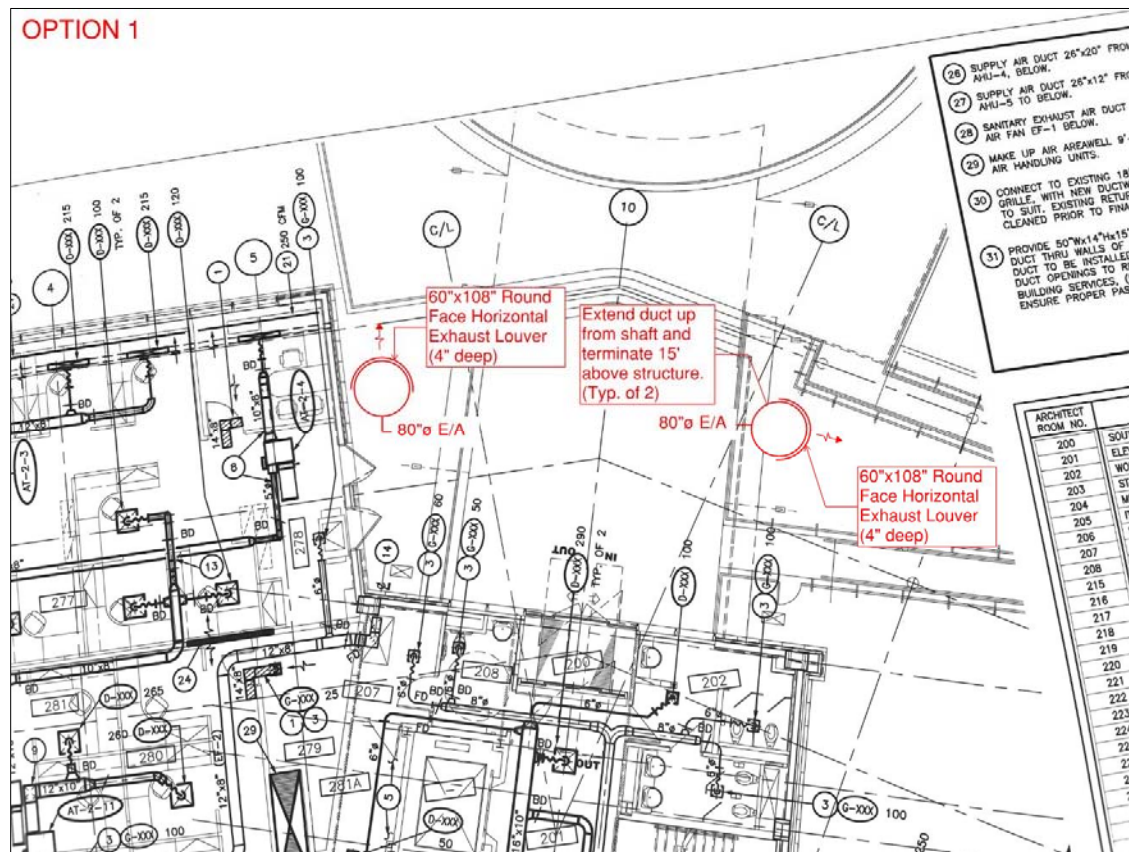
Utilizing exposed ductwork as a free-standing monument feature has been used in other municipal buildings such as the Pompidou Centre in Paris, France (Refer to Figure A) and the Bank of Canada Atrium.



Option 1 - East Elevation



Option 1 – West Elevation



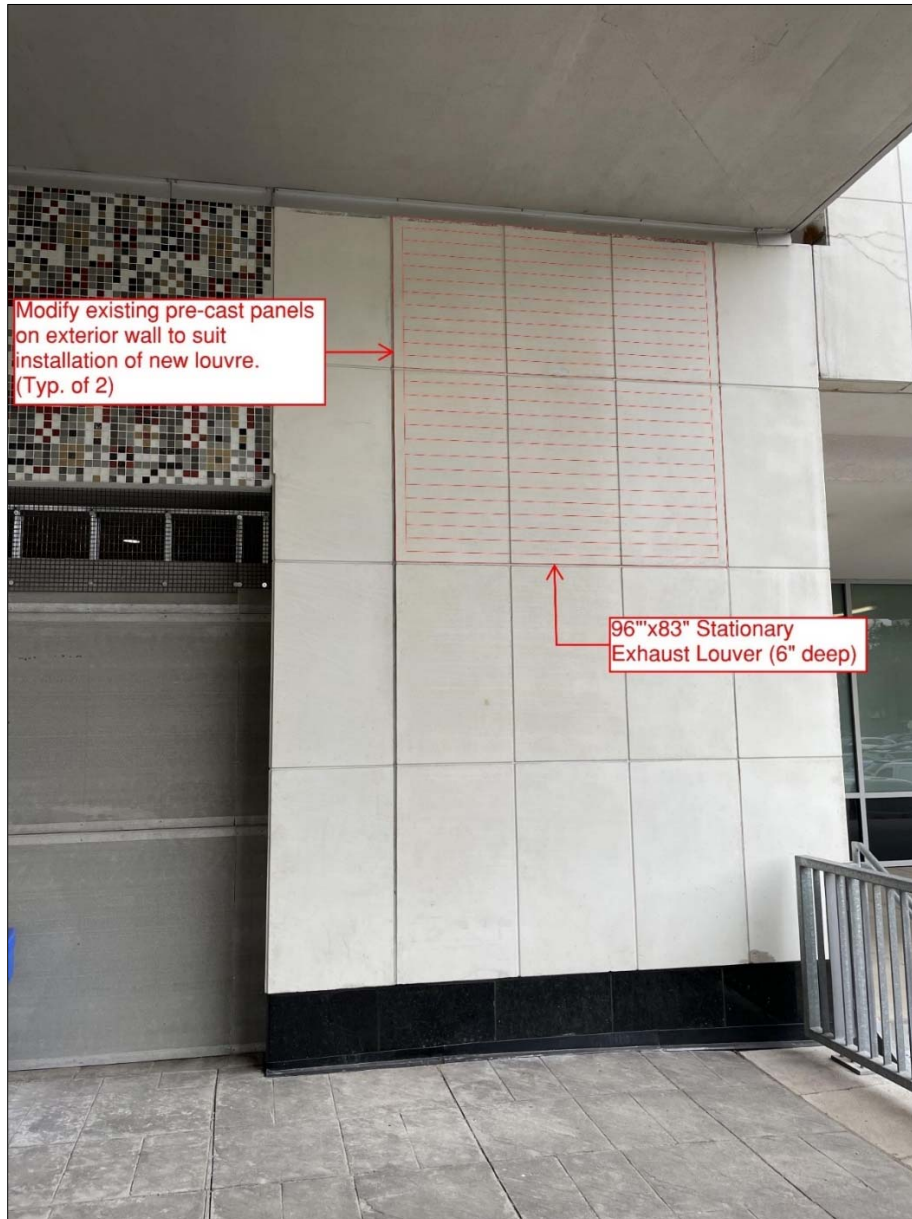
Option 1 – Plan View

3.2 Option #2

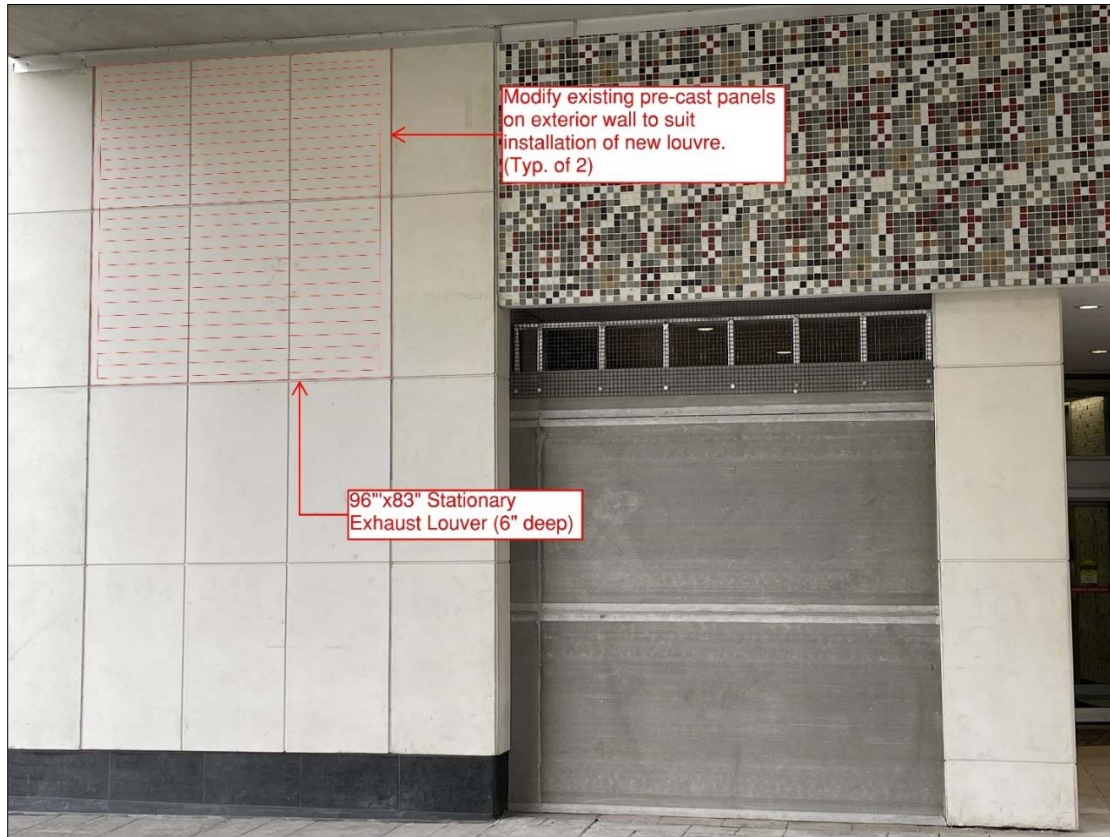
Option #2 includes providing new exhaust air louvres in the south face of the existing shafts. The existing louvres would remain but be blanked off and the new louvres would be specified to match the appearance of the existing as closely as possible.

To install these new louvres, the pre-cast panel on the south face would be removed and cut as necessary. This location, the exhaust air will be discharged beneath the covered area, and create an area of slightly warmer air, but the warmer air will be dissipated due to winds and not create a concentrated area of warm air as the current installation does.

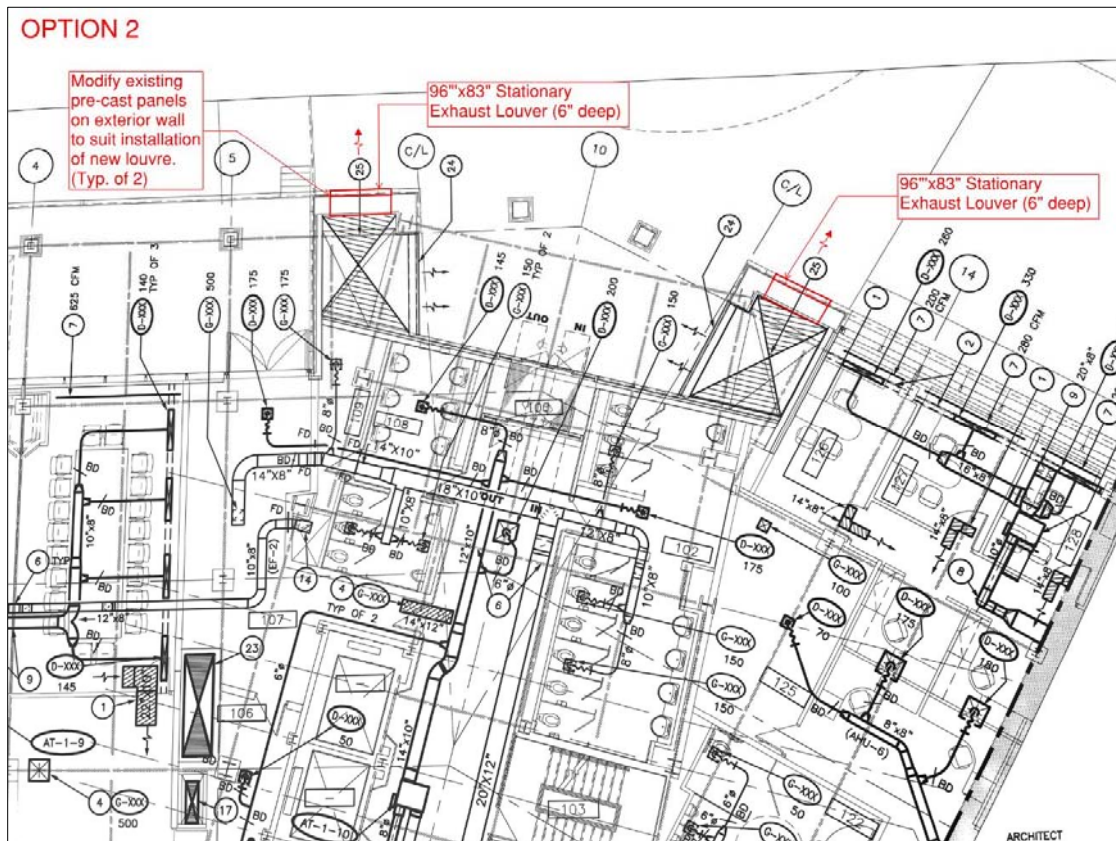
Additional options to create a new duct shaft from the basement mechanical room to run up to L2 roof were reviewed on site. An option to create this new shaft was dismissed as this would require building new duct shafts through the office and administration areas on Level 1 and 2. This would necessitate either a relocation of some staff or a reduction in usable office area.



Option 2 - East Elevation



Option 2 - West Elevation

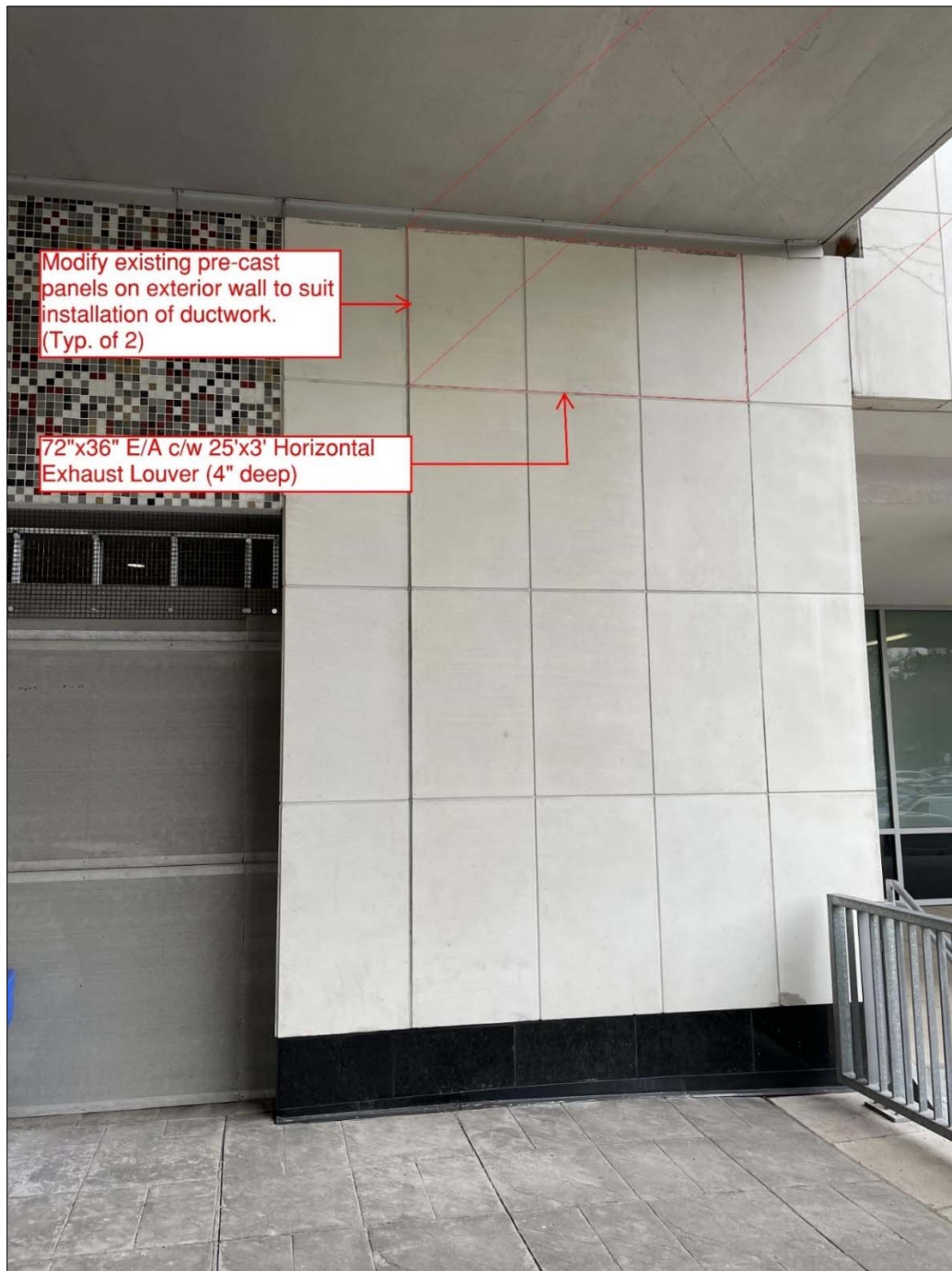


Option 2 - Plan View

3.3 Option #3

Option #3 is to extend the exhaust air discharge location further away from the existing location and aim the discharge in the east and west directions at high-level.

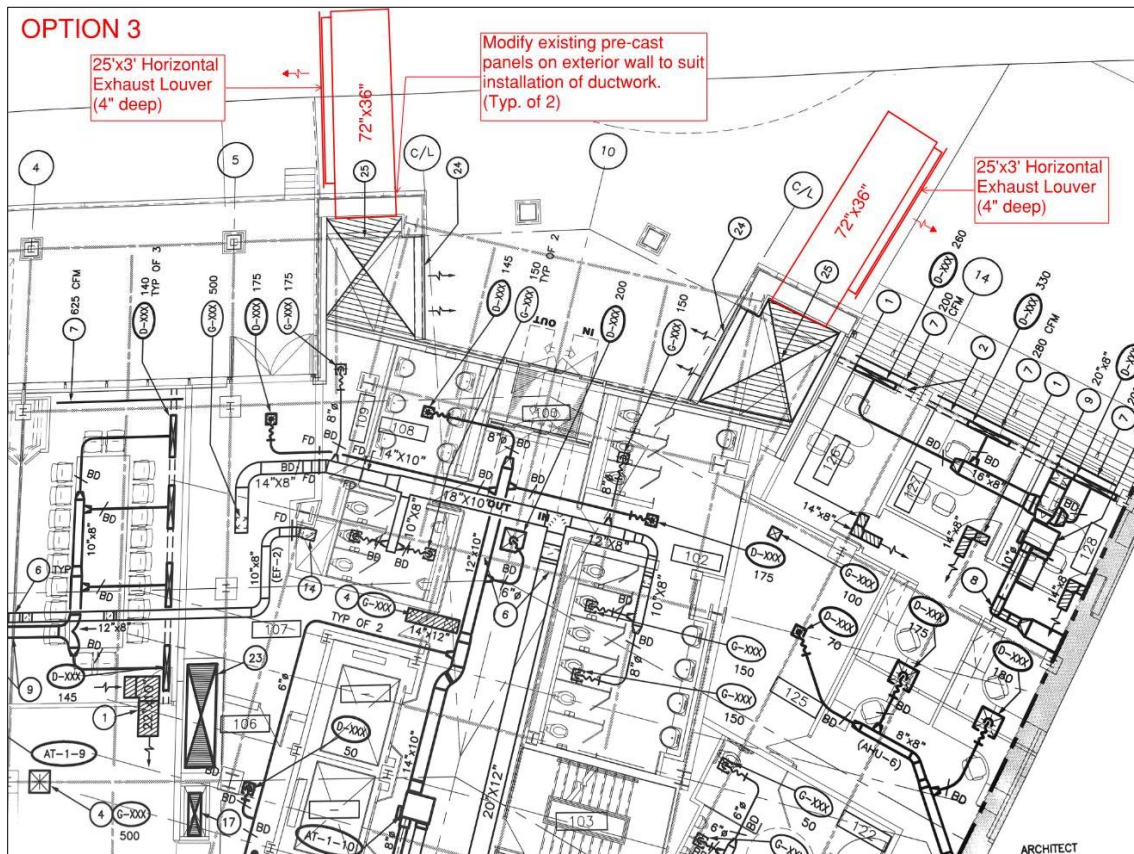
This can be accomplished by installing a 72" x 36" duct out from each shaft (southward). The pre-cast panels on south face would be removed and cut to install new duct tight to the underside of bridge above. A low profile louvre of 25" x 3" would be installed to discharge the air toward the parking lot on each side. The duct would be encased with metal cladding, so the appearance blends in with the underside of structure above.



Option 3 - East Elevation



Option 3 - West Elevation



Option 3 - Plan View

4.0 COST SUMMARY

4.1 Opinion of Probable Construction Costs

Refer to chart below for our opinion of probable construction costs for the three options identified in this report.

The opinion of costs below is based on the following:

- Work during normal hours but with premium time allowance for 50% of the labour to account for after-hours installation requirements.
- Costs are based on current information available for materials and labour.

Opinion of Probable Costs Mechanical

Hamilton City Hall - EA Duct Report

2022-0232-10

Item	Option 1 - Vertical Duct Towers	Budget Cost
1	Materials (Ductwork, Dampers, Insulation)	\$ 30,000.00
2	Two (2) EVH-501D Vertical Louvres	\$ 27,000.00
3	Labour (inc premium time)+ TAB	\$ 30,000.00
4	Miscellaneous (Patching, Coring, etc)	\$ 15,000.00
5	20% Contingency	\$ 20,400.00
6	Soft Costs (permit & design) 15%	\$ 18,360.00
7	Total	\$ 140,760.00

Item	Option 2 - Stationary Wall Louvres	Budget Cost
1	Materials (Ductwork, Dampers, Insulation)	\$ 18,000.00
2	Two (2) ESD-635 Horizontal Stationary Louvres	\$ 10,000.00
3	Labour (inc premium time)+ TAB	\$ 20,000.00
4	Miscellaneous (Patching, Coring, etc)	\$ 10,000.00
5	20% Contingency	\$ 11,600.00
6	Soft Costs (permit & design) 15%	\$ 10,440.00
7	Total	\$ 80,040.00

Item	Option 3 - Horizontal Duct Extension	Budget Cost
1	Materials (Ductwork, Dampers, Insulation)	\$ 78,000.00
2	Two (2) EVH-501D Vertical Louvres	\$ 14,000.00
3	Labour (inc premium time + TAB+Cladding)	\$ 55,000.00
4	Miscellaneous (Patching, Coring, etc)	\$ 10,000.00
5	20% Contingency	\$ 31,400.00
6	Soft Costs (permit & design) 15%	\$ 28,260.00
7	Total	\$ 216,660.00



Figure A – Pompidou Centre, Paris France

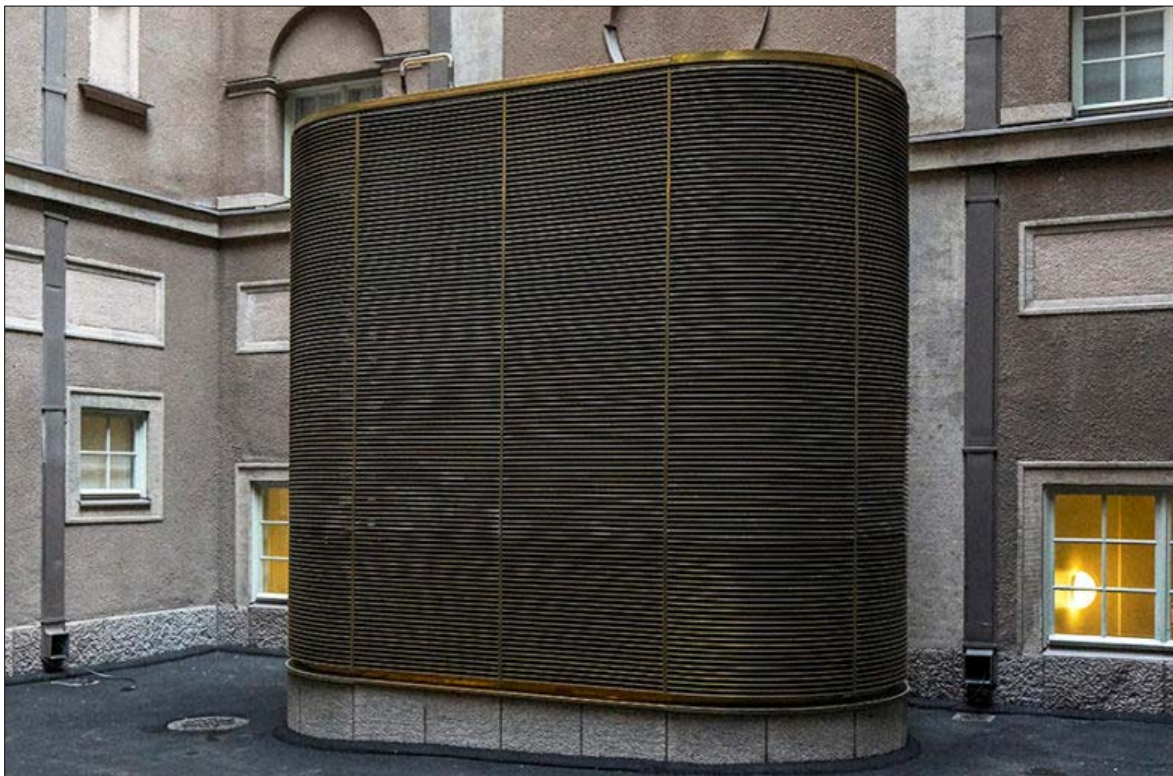


Figure B – Example of Curved Exhaust Louvre

5.0 ENERGY REPORT

5.1 Background

City of Hamilton engaged WalterFedy to complete a heat recovery analysis for Hamilton City Hall to be potentially included in the exhaust air ducting renovation. The intent is to investigate a coil energy recovery (runaround) loop given the limited space available and provide estimated energy savings.

5.2 Scope of Work

The scope of work is detailed in the ASR-01-Review of existing exhaust air at rear door associated with WalterFedy proposal number 2022-0232-10. A brief summary is as follows:

- Perform an energy analysis of implementing a heat recovery option with exhaust air.
- Provide client with energy and cost saving results in a simplified report format.

5.3 Contact Information

Contact information for WalterFedy (the Consultant) and City of Hamilton (the Client) is provided in Table 1.

Table 1: Contact Information

Description	Consultant	Client
Organization	WalterFedy	City of Hamilton
Address	Suite 1000, 20 Hughson Street South	28 James Street North, 5th Floor
Location	Hamilton, ON	Hamilton, ON
Postal code	L8N 2A1	L8R 2K1
Contact name	Patrick Darby	Julia Furi
Credentials	P.Eng., CEM, CMVP, LEED AP	FMP
Title	Senior Energy Engineer	Project Coordinator of Strategic Planning & Compliance
Phone	226 220 8968	905.546.2424 Ext. 1512
Email	pdarby@walterfedy.com	Julia.Furi@hamilton.ca

5.4 Facility Description Methodology

The facility description was developed based on the existing conditions established according to the following methodology.

1. **Facility Document Review.** Available facility documents were reviewed, including the following.
 - Building drawings.
 - Historical utility use data.
2. **Facility Description.** Information obtained from the above activities is summarized throughout Section 2.

5.5 Facility Overview

An overview of Hamilton City Hall is provided in Table 2.

Table 2: Facility Overview

Description	Unit	Value
Name	[-]	City Hall
Address	[-]	71 Main St W
Location	[-]	Hamilton, ON
Type	[-]	Office
Construction year	[-]	1960 and 2009
Gross floor area	[ft ²]	100,000
Site survey date(s)	[yyyy-mm-dd]	2022-04-27

5.6 Occupancy Schedule

The Hamilton City Hall occupancy schedule is from 08:00-17:00, Monday to Friday. The Hamilton City Hall is closed on Saturdays and Sundays.

5.7 Air Distribution

Tables 3 and 4 list details for significant air distribution systems.

Table 3: Air Distribution Systems – General

Tag	Serves	Flow	Static	Power	Manual ON	Months	Mon	Tue	Wed	Thu	Fri	Sat	Sun	ON if	OFF if
-	-	[cfm]	[in,H ₂ O]	[hp]	[1/0]	[mth]	[hr]	[hr]	[hr]	[hr]	[hr]	[hr]	[hr]	-	-
AHU3	Council chambers	9,800	1.75	15	0	1-12	0-23	0-23	0-23	0-23	0-23	0-23	0-23	0	0
AHU4	Lobbies	6,800	1.5	15	0	1-12	0-23	0-23	0-23	0-23	0-23	0-23	0-23	0	0
AHU7	Basement	9,100	2	15	0	1-12	0-23	0-23	0-23	0-23	0-23	0-23	0-23	0	0
EF1	Sanitary exhaust	4,500	2.6	5	0	1-12	0-23	0-23	0-23	0-23	0-23	0-23	0-23	0	0
EF5	Mechanical Room Exhaust	3,300	1.25	1.5	0	1-12	0-23	0-23	0-23	0-23	0-23	0-23	0-23	0	0
RF2	AHU-4 & AHU-5 Return Air	21,000	2.25	15	0	1-12	0-23	0-23	0-23	0-23	0-23	0-23	0-23	0	0
RF3	AHU-3 Return Air	9,300	1.9	5	0	1-12	0-23	0-23	0-23	0-23	0-23	0-23	0-23	0	0

Table 4: Air Distribution Systems – Loads

Tag	Serves	Min OA	Max OA	ERV effect.	Diversity	Load	Min SATSP	Winter STSP	Summer STSP	Winter RHSP	Summer RHSP
-	-	[dcml]	[dcml]	[dcml]	[dcml]	[dcml]	[C]	[C]	[C]	[dcml]	[dcml]
AHU3	Council chambers	0.194	1	0	1	0.8	18	22	22	0.3	0.7
AHU4	Lobbies	0.221	1	0	1	0.8	18	22	22	0.3	0.7
AHU7	Basement	0.288	1	0	1	0.8	18	22	22	0.3	0.7
EF1	Sanitary exhaust	0	0	0	1	0.8	0	0	0	0	0
EF5	Mechanical Room Exhaust	0	0	0	1	0.8	0	0	0	0	0
RF2	AHU-4 & AHU-5 Return Air	0	0	0	1	0.8	0	0	0	0	0
RF3	AHU-3 Return Air	0	0	0	1	0.8	0	0	0	0	0

5.8 Utility Baseline Analysis Methodology

The utility use baseline is developed from a bottom-up hourly analysis (spanning one year) of the following energy end uses, as applicable. The analysis uses hourly historical weather data measurements from the source indicated in Section 3.2. The analysis reflects the existing conditions of the facility as documented in Section 2.

1. **Fans.** Calculated for each fan identified in Section 2.4 based on the power, diversity, load, and ON/OFF conditions indicated for each fan.
2. **Heating (OA).** Calculated for each applicable fan identified in Section 2.4 based on outside air (OA) flow rates (which correspond to fan operations) and the assumed minimum supply air temperature setpoint assumed for each fan. Analysis accounts for sensible heating only.

5.9 Utility Baseline Analysis Assumptions

Assumptions applied throughout the methodology are summarized as follows:

- Historical, hourly weather data is taken from a weather station in Hamilton for the year 2019.
- GHG emissions factor and utility cost rate assumptions are as per Table 5.

Table 5: GHG Emissions Factor and Utility Cost Rate Assumptions

Category	Utility	Description	Unit	Value
GHG emissions factors	Electricity	GHG emissions factor	[mtCO ₂ e/kWh]	0.000041
	Natural gas	GHG emissions factor	[mtCO ₂ e/m ³]	0.001899
Utility cost rates	Electricity	Consumption (blended)	[\$/kWh]	0.15
	Natural gas	Consumption (blended)	[\$/m ³]	0.33

5.10 Utility Use Baseline

5.10.1 Hourly

Hourly electricity use estimates associated with relevant electricity end uses are plotted in Figure 1.

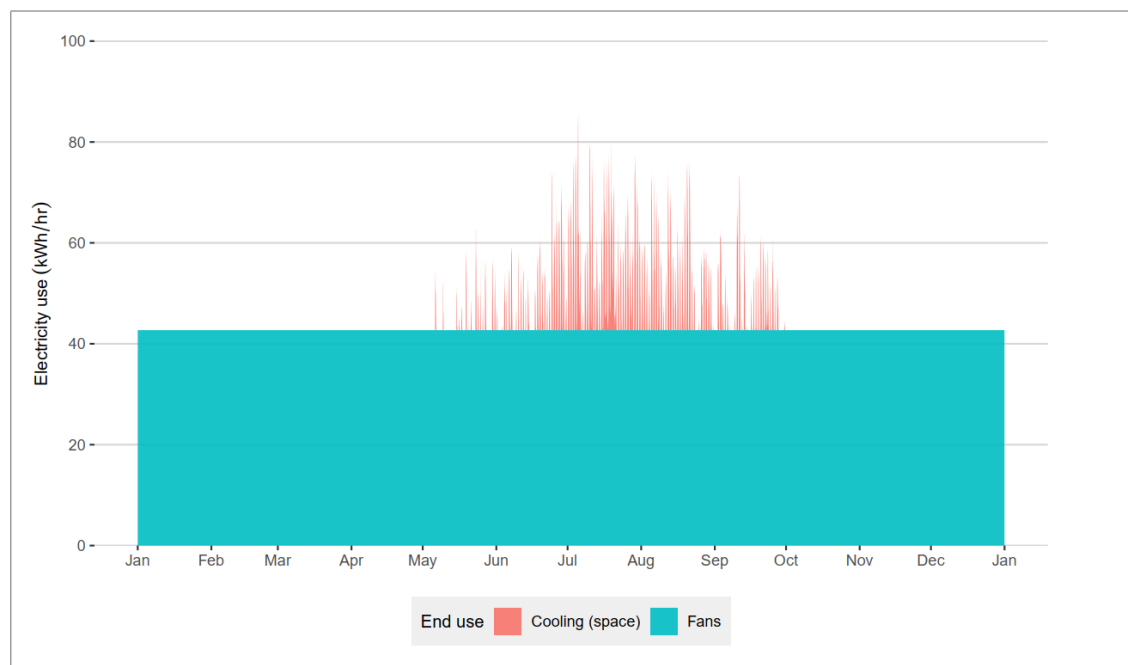


Figure 1: Modelled hourly electricity use baseline estimate

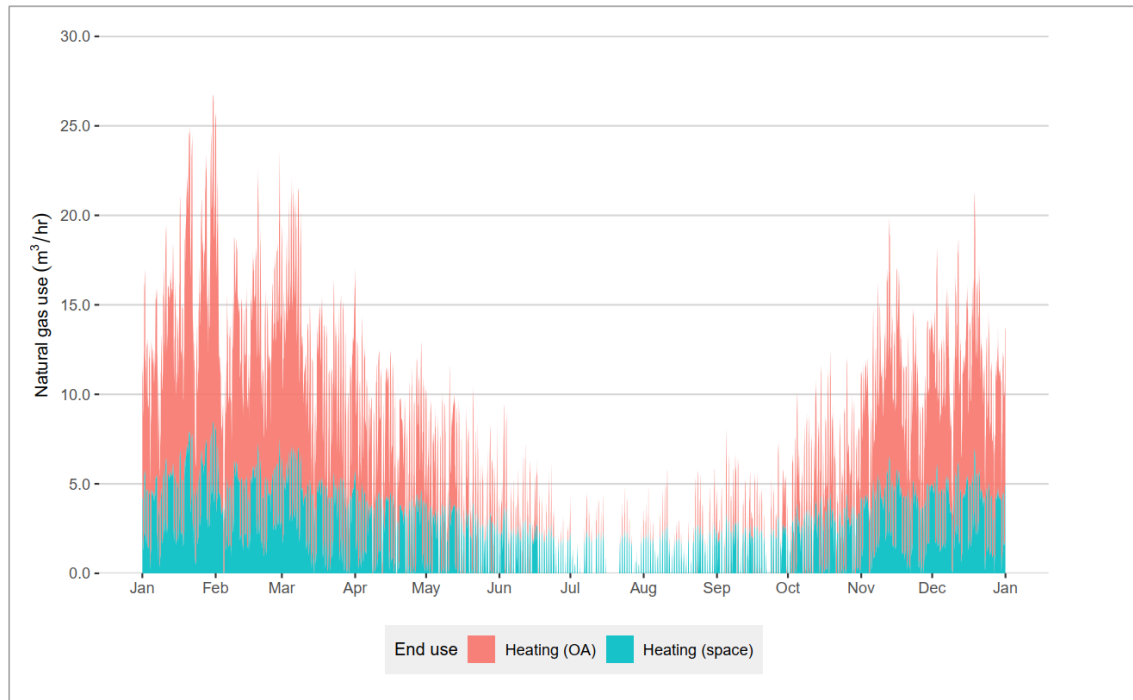


Figure 2: Modelled hourly natural gas use baseling estimate

5.10.2 Monthly

The relevant end uses for monthly electricity use and demand are plotted in Figures 3 and 4, respectively.

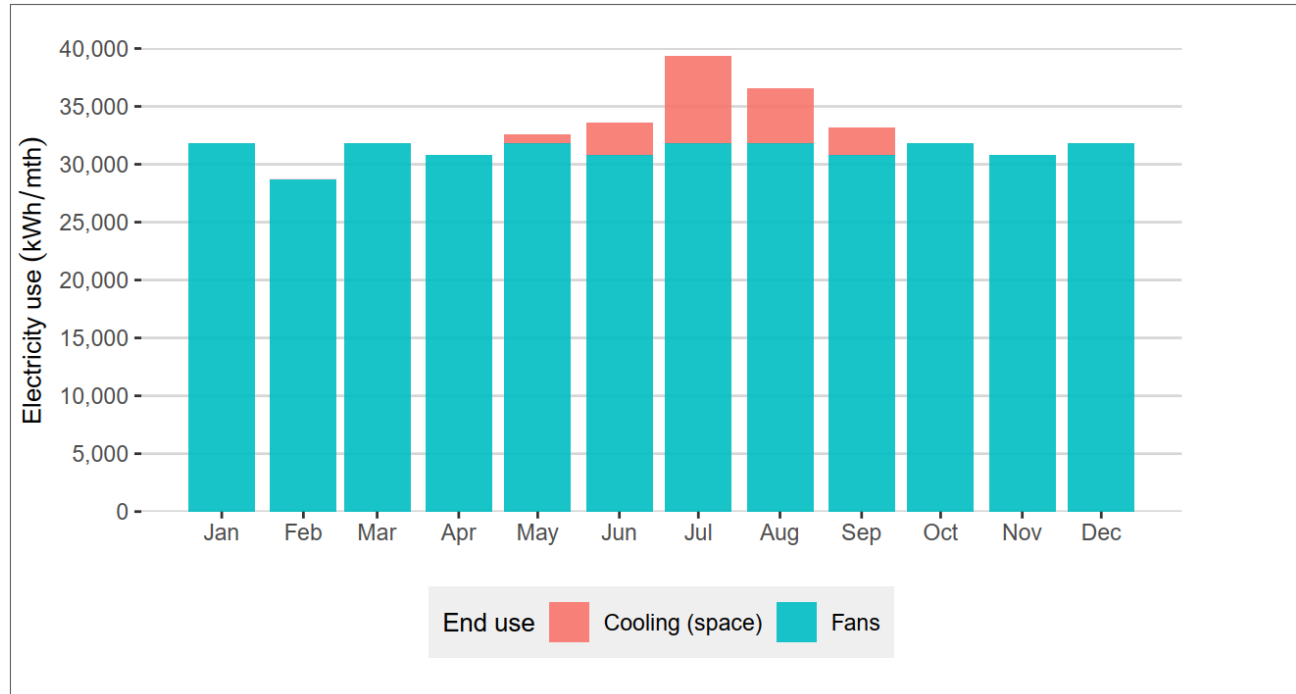


Figure 3: Modelled monthly electricity use baseline estimate

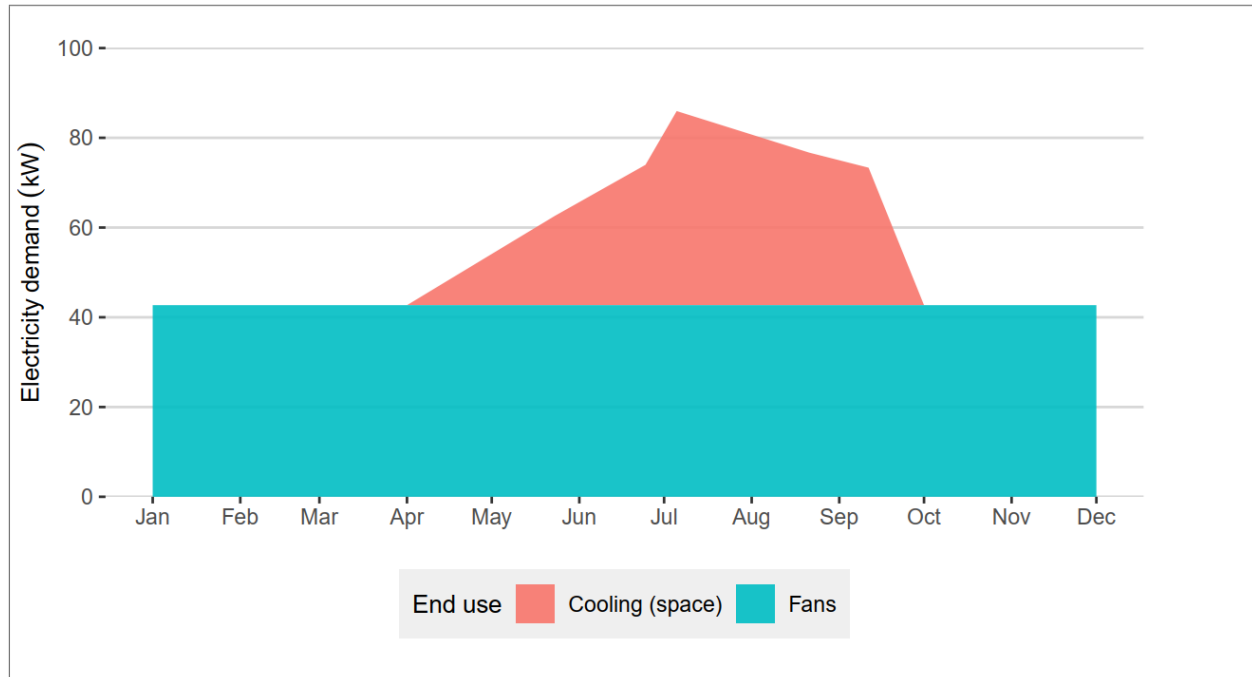


Figure 4: Modelled monthly electricity peak baseline estimate

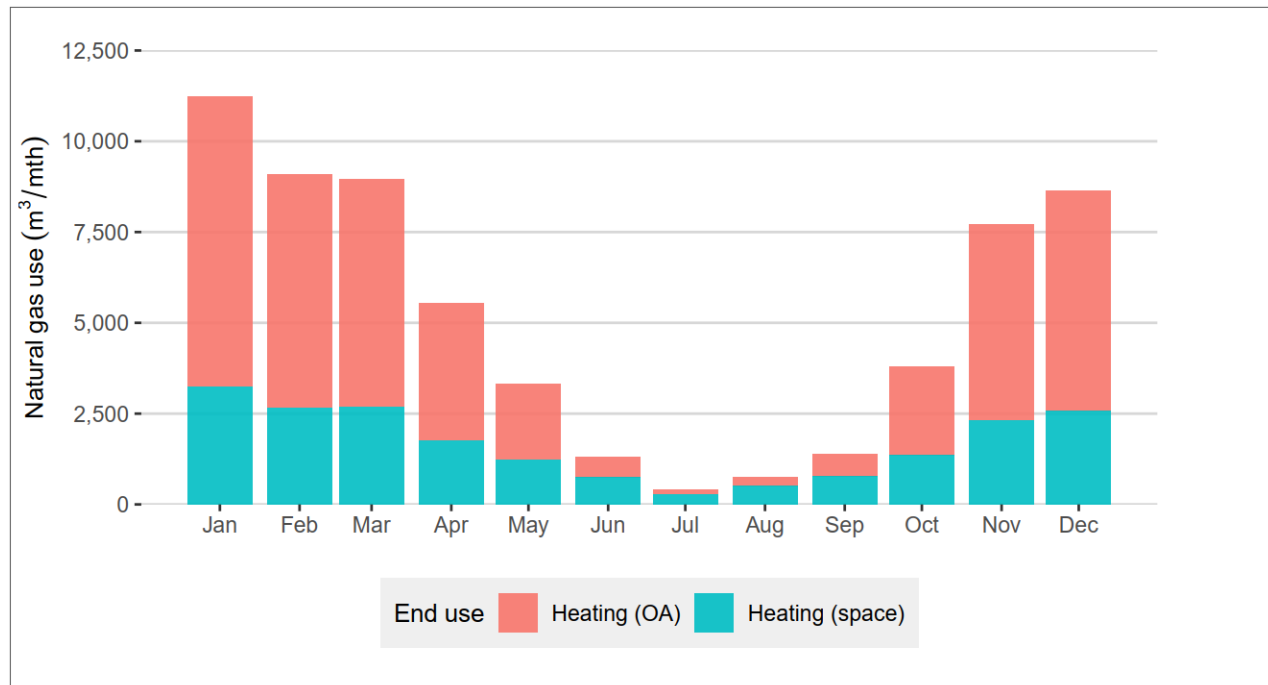


Figure 5: Modelled monthly natural gas use baseline estimate

5.10.3 Yearly

Yearly utility use of relevant end uses using the hourly electricity, and natural gas use baseline estimates is summarized in Table 6.

Table 6: Yearly Utility Use Baseline Of Relevant End Uses

Category	Description	Unit	Baseline
Utility use	Electricity use from grid	[kWh/yr]	392,567
	Electricity peak (avg)	[kW]	56
	Natural gas use	[m3/yr]	62,101
GHG emissions	Electricity GHG emissions	[tCO2e/yr]	16
	Natural gas GHG emissions	[tCO2e/yr]	118
	Total GHG emissions	[tCO2e/yr]	134
Utility cost	Electricity utility cost	[\$/yr]	58,885
	Natural gas utility cost	[\$/yr]	20,493
	Federal carbon charge	[\$/yr]	4,717
	Total utility cost	[\$/yr]	84,096

5.11 Measures Analysis Methodology

The general methodology applied for the measure analysis is as follows.

1. **Measure identification.** A run-around loop for heat recovery has been identified as an energy saving opportunity as part of an exhaust duct relocating project at the Hamilton City Hall. A run-around loop has been analyzed due to space constraints that prohibits the use of an energy recovery wheel or an energy/heat recovery ventilator.
2. **Energy analysis.** Energy analysis is completed for this measure, as follows.
 - Electricity and natural gas use reduction are estimated according to the same methodology as in the utility use baseline analysis (see Section 3.1), except with modified assumptions specific to the measure. The modified assumptions are summarized in the report section dedicated to that measure. The energy use reduction is calculated as the difference between baseline and proposed scenario energy use.
 - GHG emissions reduction is estimated based on the electricity and natural gas use reduction estimates and GHG emissions factor assumptions indicated in Table 5.
 - Utility cost reduction (for electricity and natural gas) is calculated based on the electricity and natural gas use reduction estimates and cost rates summarized in Table 5.
3. **Results summary.** Results of the measure analysis are summarized throughout Section 4.

5.12 Measure Analysis Assumption

Assumptions general to all measures are as follows:

- GHG emissions factor and utility cost rate assumptions are as per Table 5, in Section 3.2.

5.13 Measures Considered but Not Analyzed

Below are other energy recovery options for the exhaust air systems at Hamilton City Hall that were considered but not analyzed. Descriptions of the measures and the reasons they were not analyzed are provided below.

- **Energy recovery wheel.** An energy recovery wheel transfers both sensible and latent heat from the exhaust air to the supply air via a physical wheel rotating through both air streams. This requires the exhaust and return air streams be located side by side. The configuration of the existing ductwork and the physical space requirement for the energy recovery wheel would require an expensive redesign of the HVAC system leading to an unreasonably long payback period so this measure is not analyzed further.
- **Energy recovery core.** An energy recovery core transfers both sensible and latent heat from the exhaust air to the supply air via heat exchange core with an air stream passing through it on either side. This requires the exhaust and return air streams be located side by side. The configuration of the existing ductwork and the physical space requirement for the energy recovery core would require an expensive redesign of the HVAC system leading to an unreasonably long payback period so this measure is not analyzed further.

5.14 Occupancy Schedule Optimization

5.14.1 Measure Description

(1) Existing Condition

EF1, EF2, RF2, RF3, AHU3, AHU4, and AHU7 all operate 24/7.

(2) Recommended Action

It may be possible to reduce energy use by using occupancy schedules on the AHUs.

(3) Utility-savings mechanism

Reduced fan energy use through reduced run-time. Reduced heating and cooling energy use associated with reduced OA flow when the unit is OFF.

5.14.2 Measure Details

Project costs are based on previous project experience.

Table 7: Project Cost Estimate

Line item	Unit	Value
Controls Trade Labour	[\$]	5,000
Total	[\$]	5,000

5.14.3 Utility Analysis

Baseline: Existing conditions modelled as described in Tables 3 and 4. All units operate 24/7. Proposed: EF1, EF2, RF2, and RF3 and AHU3, AHU4, and AHU7 are modelled to operate from 06:00-19:00, Monday to Friday when the building is occupied and are turned OFF at night and on Saturday and Sunday. Note that this operating schedule is only assumed for the purpose of demonstrating potential energy savings and has not been confirmed with the building owner.

Analysis results are summarized in the following table.

Table 8: Analysis Results Summary

Category	Description	Unit	Baseline	Proposed	Reduction	Reduction (%)
Utility use	Electricity use from grid	[kWh/yr]	392,567	162,518	230,049	58.6
	Electricity peak (avg)	[kW]	56	56	0	0.0
	Natural gas use	[m3/yr]	62,101	26,860	35,241	56.7
GHG emissions	Electricity GHG emissions	[tCO2e/yr]	16	7	9	58.4
	Natural gas GHG emissions	[tCO2e/yr]	118	51	67	56.8
	Total GHG emissions	[tCO2e/yr]	134	58	76	56.7
Utility cost	Electricity utility cost	[\$/yr]	58,885	24,378	34,507	58.6
	Natural gas utility cost	[\$/yr]	20,493	8,864	11,629	56.7
	Federal carbon charge	[\$/yr]	4,717	2,040	2,677	56.8
	Total utility cost	[\$/yr]	84,096	35,282	48,814	58.0
Financial	Total project cost	[\$]	0	5,000	-5,000	-
	Simple payback period	[yr]	-	0.1	-	-

5.15 Run Around Loop

5.15.1 Measure Description

(1) Existing Condition

There is no heat recovery between the exhaust air in EF1, EF2, RF2, and RF3 and the supply air in AHU3, AHU4, and AHU7. Further details about these units can be found in Tables 3 and 4.

(2) Recommendation Action

Install a run around loop to recover heat from the exhaust air stream to the supply air stream. This will reduce the amount of energy needed to condition outside air because of the heat recovery from the exhaust air stream in the winter.

(3) Utility Savings Mechanism

Reduced natural gas consumption due to reduced hot water use in the heating coils for the AHUs in the winter. A small decrease in electricity consumption is expected in the summer due to the exhaust air being close in temperature to the outside air. However, electricity consumption will increase from the additional pump required for the run around loop and for the fans to overcome the additional pressure drop from the added coils. Overall, changes in electricity consumption are expected to be approximately negligible.

5.15.2 Measure Details

Refer to the table below for our opinion of probable construction costs for the installation of four (4) heat recovery coils, four (4) pre-heat coils, along with two (2) circulating pumps, piping, glycol tank and controls for the run around loop. Costs assume all work is done during normal work hours and are based on current information available for materials and labour.

Table 9: Project Cost Estimate

Line item	Unit	Value
Materials and Labour	[\$]	60,000
Total	[\$]	60,000

5.15.3 Utility Analysis

Baseline: Existing conditions modelled as described in Tables 3 and 4. Proposed: EF1, EF2, RF2, and RF3 and AHU3, AHU4, and AHU7 are modelled with an energy recovery effectiveness of 40%. All other variables remain unchanged from the baseline.

Analysis results are summarized in the following table.

Table 10: Analysis Results Summary

Category	Description	Unit	Baseline	Proposed	Reduction	Reduction (%)
Utility use	Electricity use from grid	[kWh/yr]	392,567	392,195	372	0.09
	Electricity peak (avg)	[kW]	56	54	2	3.57
	Natural gas use	[m3/yr]	62,101	40,544	21,557	34.71
GHG emissions	Electricity GHG emissions	[tCO2e/yr]	16	16	0	0.00
	Natural gas GHG emissions	[tCO2e/yr]	118	77	41	34.75
	Total GHG emissions	[tCO2e/yr]	134	93	41	30.60
Utility cost	Electricity utility cost	[\$/yr]	58,885	58,829	56	0.10
	Natural gas utility cost	[\$/yr]	20,493	13,380	7,113	34.71
	Federal carbon charge	[\$/yr]	4,717	3,080	1,637	34.70
	Total utility cost	[\$/yr]	84,096	75,288	8,808	10.47
Financial	Total project cost	[\$]	0	60,000	-60,000	-
	Simple payback period	[yr]	-	6.8	-	-

5.16 Recommendations

Table 11 summarizes the results of the utility use baseline and measure analyses.

Table 11: Measure Analysis Results Summary

Measure name	Final recommendation	Electricity use from grid	Grid electricity use reduction	Electricity peak reduction	Natural gas use	Natural gas use reduction	Total GHG emissions	GHG emissions reduction	Total utility cost	Utility cost reduction	Total project cost	Simple payback period
-	-	[kWh/yr]	[%]	[%]	[m3/yr]	[%]	[tCO2e/yr]	[%]	[\$/yr]	[%]	[\$]	[yr]
Baseline		392,567	0.0	0.0	62,101	0.0	134.0	0.0	84,096	0.0	0	-
Occupancy schedule optimization	Optional	162,518	58.6	0.0	26,860	56.7	57.7	57.0	35,282	58.0	5,000	0.1
Run around loop	Optional	392,195	0.1	3.5	40,544	34.7	93.1	30.6	75,288	10.5	60,000	6.8

It is recommended to further investigate and review occupancy and HVAC equipment control schedules throughout the Hamilton City Hall. These measures have potential for large energy savings if the equipment is currently ON 24/7 or if an occupancy schedule has been overridden and the equipment is being forced ON. Typically, control optimization measures have a low implementation cost leading to short payback periods.

5.17 Glossary

Typical terms and acronyms that may be used in this report are defined as follows:

AHU: Air handling unit.	OA: Outside air.
C: Cooling.	OAD: Outsider air damper.
D: Damper.	OAHU: Outside air humidity.
dcml: Decimal (e.g. as opposed to percent).	OAT: Outside air temperature.
DHW: Domestic hot water.	PAT: Preheated air temperature.
DX: Direct expansion.	RAD: Return air damper.
EAD: Exhaust air damper.	RAHU: Return air humidity.
EAT: Exhaust air temperature.	RAHU: Return air humidity setpoint.
FBD: Face and bypass damper.	RAT: Return air temperature.
FBPD: Face and bypass damper.	RATSP: Return air temperature setpoint.
H: Heating.	RMT: Room temperature.
HRGRT: Heat recovery glycol return temperature.	RMTSP: Room temperature setpoint.
HRGST: Heat recovery glycol supply temperature.	SAHU: Supply air humidity.
HU: Humidity.	SAHUSP: Supply air humidity setpoint.
MAD: Mixed air damper.	SAT: Supply air temperature.
MADC: Mixed air damper control.	SATSP: Supply air temperature setpoint.
MAHU: Mixed air humidity.	SP: Space / setpoint.
MAHUSP: Mixed air humidity setpoint.	SPHU: Space humidity.
MAT: Mixed air temperature.	SPHUSP: Space humidity setpoint.
MATSP: Mixed air temperature setpoint.	SPT: Space temperature.
MAU: Makeup air unit.	SPTSP: Space temperature setpoint.
MLF: Master list of findings.	T: Temperature.

APPROPRIATION ADJUSTMENT SCHEDULE - SOUTHCOTE ROAD - GARNER ROAD TO HIGHWAY 403 BRIDGE

Project Number	Project Description	GROSS COST			REVENUE			NET FINANCING REQUIRED			REASON FOR ADJUSTMENT
		Budget	Increase/ (Decrease)	Revised	Budget	Increase/ (Decrease)	Revised	Budget	Increase/ (Decrease)	Revised	
5182271328	Southcote Road - Garner Road to Highway 403 Bridge	2,933,828		4,708,028	0 Reserve 108010		1,774,200	2,933,828		2,933,828	Increased limits of storm sewer installation / replacement. It was determined the storm sewer along the project limits required upgrading (increase in capacity) to support drainage along the route and to urbanize Southcote Road from south of Burbridge Way to Highway 403 Bridge. To be funded by Storm Reserve #108010
			1,774,200			1,774,200			0		
5142171328	Southcote Road - Garner Road to Highway 403 Bridge	3,200,000		3,364,000	1,007,600 Res DC 592,400 Non Res DC		1,059,240 622,760	1,600,000		1,682,000	Increased watermain scope to include additional watermain replacement (upsizing) on Southcote Road from Gray Court to Bookjans Drive.
			164,000			51,640 30,360			82,000		
5142160711	PW Capital Water Consumption Program - 2021/22	500,000		418,000	0		0	500,000		418,000	Lower than estimated costs associated with water consumption used for works on City contracts, during construction i.e. flushing watermain, etc.
			-82,000			0			-82,000		
4032011028	Southcote Road - Garner Road to Highway 403 Bridge	5,140,000		7,204,000	1,542,000 Res DC 1,542,000 Non Res DC		2,161,200 2,161,200	2,056,000		2,881,600	Increased costs as a direct result of major increase in material and labour cost caused by the pandemic/inflation. Supply and chain issues due to the Geopolitical conflicts, fuel and transportation cost, and the Ontario Regulation 406/19-Onsite and Excess Soil Management
			2,064,000			619,200 619,200			825,600		