



TO: GENERAL COMMITTEE

SUBJECT: FUNDING REQUEST FOR VARIOUS INFRASTRUCTURE PROJECTS

WARD: ALL

PREPARED BY AND KEY CONTACT: S. DIEMERT, MANAGER OF VERTICAL INFRASTRUCTURE PROJECTS, EXT. 5150

SUBMITTED BY: B. ARANIYASUNDARAN, P. ENG., DIRECTOR OF INFRASTRUCTURE

GENERAL MANAGER APPROVAL: A. MILLER, RPP, GENERAL MANAGER OF INFRASTRUCTURE AND GROWTH MANAGEMENT

CHIEF ADMINISTRATIVE OFFICER APPROVAL: M. PROWSE, CHIEF ADMINISTRATIVE OFFICER

RECOMMENDED MOTION

1. That staff be authorized to release funding commitments in the amount of \$2,879,030 and adjust funding plans as described in Appendix “A” to Staff Report INF004-20 (Projects with Excess Committed Funding) and close applicable capital projects on the next capital status report.
2. That staff be authorized to proceed with existing projects requiring additional funding as identified in Appendix “B” to Staff Report INF004-20 in the amount of \$2,102,089, with \$1,309,659 to be funded from the Tax Capital Reserve, \$236,000 to be funded from the Water Capital Reserve, \$409,750 to be funded from the Wastewater Capital Reserve, and \$146,680 to be funded from the Development Charges Reserve.
3. That the City project entitled “Bayfield Street Resurfacing (Cundles Road to Livingstone Street)” be added to the 2020 Capital Plan with a total budget of \$1,530,000 with a funding split of \$1,377,000 from the Ministry of Transportation and \$153,000 from the City of Barrie and that the City’s portion be included in the 2020 Capital Plan as part of project EN1289, Road Resurfacing Program, to be funded from the Federal Gas Tax.

PURPOSE & BACKGROUND

4. The purpose of this report is to return excessive project funding and to request additional project funds within the limits of the capital plan in order to ensure that projects progress based on need and approvals as outlined in the Corporation’s Capital Plan.
5. Project managers are responsible for ensuring each capital project assigned to them adheres to schedule requirements and financial policies throughout the year.

Any over expenditures below the materiality threshold can be addressed by the Department Head, subject to review by the Director of Finance or delegate, through the use of holding accounts established for each fund (i.e. tax rate, water rate, wastewater rate, and parking rate).

Any over expenditures above the materiality threshold are normally addressed through the Capital Status Report (CSR). The CSR is not planned until Fall 2020 and as such, these material changes need to be brought forward to Council in this Staff Report format.

ANALYSIS

6. Projects with Excess Funding – Appendix A

- a) Appendix A identifies capital projects by functional area that are either completed and have excess funds, or are still underway but excess funds have been identified based on tender results. All completed projects will be closed on the next capital status report.
- b) Generally, excess funds are the result of several factors. The common reasons include:
 - i. Economies of scale and competitive bid process;
 - ii. Better than expected market conditions. These are very hard to predict at the capital planning stage, well in advance of the actual tendering and construction. The market conditions can fluctuate a number of times throughout the year, and can be affected by what other municipalities are doing, or not doing;
 - iii. The City includes contingencies in projects, which in some cases are not utilized. The contingencies are required to address project risks, such as unknown underground installations or soil conditions that cannot be determined prior to construction; and
 - iv. Projects are cancelled.

7. Projects Requiring Additional Council Approved Funding – Appendix B

The following identifies capital projects that exceed their materiality threshold (the lesser of 10% of the project budget or \$500,000) or where there are insufficient funds available in the holding accounts. In these instances, Council approval is required for additional funding. The projects are either those that are still active and require additional funds in order to complete or projects that have been completed but require additional funding in order to close them. Staff have provided detailed comments/explanations in the appendix for each project where an over expenditure occurred.

The total anticipated over expenditure represents \$2.1M with the explanations for the requested additional funding described below. Staff in the Infrastructure Department are aware of the on-going pressure on the Capital Plan and have now completed a full review of each Capital Project Cost Report in order to recalibrate the true cost of the Capital Plan. These adjustments will be reflected in the 2021 Capital Plan cycle and will reduce the need to come to Council with as many requests for additional funding.

a) Morrow Road Improvements – Ardagh to Patterson – EN1099

Additional Funding Required: \$180,196 (\$180,196 – Tax Capital Reserve)

Additional funding required to pay for the transfer of utilities from the old hydro poles to the new poles so that the old poles can be removed.

b) **Little Lake Sewage Pump Station Upgrade – EN1122**

Additional Funding Required: \$270,000 (\$270,000 – Wastewater Capital Reserve)

The original scope from 2018 for this project was revised in 2020 to address recently identified capital upgrades that were identified through detailed condition assessments. Additionally, completion of geotechnical investigations have increased project requirements in relation to groundwater treatment and dewatering. These changes will result in additional engineering costs and City project management costs. Additional construction costs will be budgeted in the future once accurate cost estimates are developed for construction.

c) **Lovers Creek New Bridge Tollendale Mill, 150 m West of Coxmill – EN1169.22.20**

Additional Funding Required: \$109,893 (\$38,463 – Tax Capital Reserve, \$71,430 DC Reserves)

Gas main relocation was complicated due to curvature in road and depth of directional drilling required.

d) **WwTF Alum System Upgrade at Secondary Clarifiers – EN1192.23**

Additional Funding Required: \$215,000 (\$139,750 – Wastewater Capital Reserve, \$75,250 – DC Reserves)

Additional funds are required to defray additional construction costs, engineering costs and City project management costs. The scope for this project was revised in 2020 to be compatible with the proposed configuration of the treatment processes that are planned over the next ten (10) years.

e) **City Wide Cycling Network Improvement - EN1265**

Additional Funding Required: \$525,000 (\$525,000 – Tax Capital Reserve)

This project provides an important pedestrian connection on Hurst Drive to the Lakeshore waterfront pathway as well as Centennial Park and has approved funding from the province. As this project is located within a regulated area near Whiskey Creek, multiple storm water quality initiatives were required as part of the permitting process. Additionally, due to site constraints, the entire roadway also needed to be shifted in order to provide an appropriate width AODA complaint multi-use pathway. Asphalt resurfacing of the entire road surface was also included to address the poor roadway condition. These requirements were not anticipated at project initiation and have increased the overall project cost.

f) **Lovers Creek Channel Rehabilitation – Adjacent to Brunton Park – EN1285.21.34**

Additional Funding Required: \$250,000 (\$250,000 – Tax Capital Reserve)

The additional funds are required in 2020 to advance property acquisition to 2020. Property for this project is required in order to restore the creek channel. Ongoing discussions with the current property owner have been positive. Advancing property funding phase for this project provides design efficiencies and will allow staff to advance project schedule.

g) **Bayfield Street Water Tower - Repairs and Interior Lining Replacement – EN1309**

Additional Funding Required: \$172,000 (\$172,000 – Water Capital Reserve)

The construction tender of this project was deferred from 2019 due to seasonal and supply constraints. The project team is increasing the project budget to account for escalation in construction prices and additional project management and engineering costs.

h) **Grove Street East Watermain Replacement and Road Renewal – Duckworth to Fletcher – EN1355**

Additional Funding Required: \$80,000 (\$80,000 – Tax Capital Reserve)

Staff would like to advance field investigations by one year and initiate them in 2020. This will accelerate the project schedule and provide cost savings by combining field investigations with other projects through economies of scale.

i) **Alliance Boulevard Expansion – Bell Farm to Bell Farm - EN1435**

Additional Funding Required: \$100,000 (\$100,000 – Tax Capital Reserve)

Staff would like to advance field investigations by one year and initiate them in 2020. This will accelerate the project schedule and provide cost savings by combining field investigations with other projects through economies of scale.

j) **Holly Community Centre Building Automation System Replacement – FC1134**

Additional Funding Required: \$200,000 (\$200,000 – Tax Capital Reserve)

The original project scope and budget was based off a similar project completed at the East Bayfield Community Centre. A similar procurement was completed in January 2020, about 18 months after East Bayfield project was complete and the market value was significantly more than expected. A major change to the scope of work in order to reduce the budget is not feasible, thus we are requesting the additional funding to complete the full scope required to replace the failing building automation system at the Holly Community Centre.

8. **Projects Requiring Additional Funding (Delegated Authority) – Appendix C**

Appendix C includes capital projects that have been over spent but are within the materiality threshold of the lesser of 10% of the project budget or \$500,000 as established in the Capital Project Financial Control Policy. As per the Capital Project Financial Control Policy, Department Heads, subject to the review by the Director of Finance or delegate, have delegated authority to transfer the required funds from the appropriate holding accounts established for this purpose. This information is being provided for information purposes only.

9. **Bayfield Street Resurfacing**

The City has successfully secured funding under the Ministry of Transportation's 2020-2021 Connecting the Links Program. The ministry will be contributing \$1,377,000 towards the resurfacing of Bayfield Street (Cundles Road to Livingstone Street). The total project cost is estimated to be \$1,530,000 with the ministry contributing 90% of the funds for the project. The City's portion is \$153,000 and represents 10% of the estimated project cost. The City's portion is included as part of the 2020 capital plan in project EN1289, Road Resurfacing Program, and is funded from Federal Gas Tax.

ENVIRONMENTAL AND CLIMATE CHANGE IMPACT MATTERS

10. There are no environmental and/or climate change impact matters related to the recommendations.

ALTERNATIVE

11. There is one alternative available for consideration by General Committee:

Alternative #1

General committee could choose not to provide additional funds to these projects.

This alternative is not recommended as these projects could not proceed without the additional funds.

FINANCIAL

12. The financial impacts are identified in the analysis section of the report.

LINKAGE TO 2018-2022 STRATEGIC PLAN

13. The recommendation(s) included in this Staff Report support the following goals identified in the 2018-2022 Strategic Plan:

- Fostering a Safe and Healthy City
- Building Strong Neighbourhoods
- Improving the Ability to Get Around Barrie

The approval of additional funding will allow the projects to proceed in a timely manner and when completed, will help continue to build strong neighborhoods and improve the ability to get around by improving upon both the condition of our roads. The completion of these projects will also help foster a safe and healthy city by improving storm water runoff, improving the water quality in our creeks and reduce the flood risks improving community safety.

APPENDIX "A"
Projects with Excess Funds (Page 1)

Project Name	Project	Total Approved Budget	Total Project Cost to Date	Funding to be Returned	Funding				Comments	
					Tax Capital Reserve	Development Charges	Water Capital Reserve	Wastewater Capital Reserve		Other
Raw Sludge Pump	EN1055	\$883,345	\$805,900	\$77,445				\$77,445		
Return Active Sludge Piping Replacement	EN1056	\$779,253	\$753,259	\$25,994				\$25,994		
Little Avenue Retaining Wall	EN1076.23.10	\$225,000	\$200,735	\$24,265	\$24,265					
Pond LV4 - East of Bayview	EN1078.23.24	\$1,375,000	\$1,258,607	\$116,393	\$116,393					
Morrow Road Improvements - Ardagh to Patterson	EN1099.18.28	\$1,060,772	\$839,374	\$221,398		\$221,398				
Cundles Road Pavement and Watermain Rehabilitation - Sunnidale to Leacock	EN1119	\$569,101	\$520,461	\$48,640	\$6,949				\$41,691	FGT Funding, funding adjustment as follows: EN1119.18.10 return \$175,000, EN1119.23.10 request \$126,360
Glen Echo Drive and College Crescent Watermain and Pavement Rehabilitation	EN1120	\$1,729,510	\$1,694,565	\$34,945	\$3,951				\$30,994	FGT Funding, funding adjustment as follows: EN1120.23.10 return \$35,291, EN1120.23.28 request \$346
McKay Road New Overpass and Transmission Watermain - Highway 400	EN1121.23.10	\$2,500,000	\$2,311,070	\$188,930	\$28,340		\$160,591			
Sanitary Pump Station 3 Decommissioning	EN1149.23.26	\$538,903	\$497,037	\$41,866			\$20,933	\$20,933		
Anne and Innisfil Railway Crossing Upgrade-BCRY	EN1151.23.10	\$400,000	\$378,483	\$21,517	\$21,517					
Baldwin Lane Watermain Replacement - Marshall to Bayview	EN1163	\$1,088,091	\$1,086,751	\$1,340	\$1,340					Funding adjustments as follows: EN1163.23.10 return \$8,247, EN1163.23.26 request \$1,333, EN1163.23.28 request \$5,574
Henry Street ROW Replacement - Frances to Eccles	EN1174	\$1,131,017	\$1,098,726	\$32,291	\$32,291					Funding adjustments as follows: EN1174.23.10 request \$4,320, EN1174.23.22 return \$37,809, EN1174.23.26 request \$907, EN1174.23.28 request \$291
Bayfield Street Resurfacing	EN1231	\$742,399	\$742,149	\$250					\$250	FGT
Bayfield Street Pavement Rehabilitation - Cundles to Coulter	EN1248	\$1,860,000	\$1,720,109	\$139,891	\$10,229				\$129,662	FGT
Albert Street New Drainage Outlet	EN1283.18.22	\$75,000	\$70,679	\$4,321					\$4,321	FGT
Pavement Condition Assessment	EN1292	\$345,000	\$279,930	\$65,070					\$65,070	FGT
Huron Road Pavement Holding Strategy - Little to Yonge	EN1303.23.10	\$155,000	\$136,707	\$18,293	\$18,293					
Mimets Point Sewage Pump Station Relocation	EN1304.18	\$860,000	\$11,709	\$848,291					\$848,291	

APPENDIX "A"
Projects with Excess Funds (Page 2)

Project Name	Project	Total Approved Budget	Total Project Cost to Date	Funding to be Returned	Funding					Comments
					Tax Capital Reserve	Development Charges	Water Capital Reserve	Wastewater Capital Reserve	Other	
Sunnidale Road Hwy 400 Crossing Reconstruction	EN1316.14.26	\$95,000	\$55,709	\$39,291				\$39,291		
Sophia Creek-Grove Street Spillway 207-229 Grove	EN1325.21.22	\$600,000	\$410,000	\$190,000	\$190,000					
WwTF Septage/Supernating Dosing Tank Pre-Treatment Upgrade	EN1328	\$250,000	\$0	\$250,000				\$250,000		
WwTF/BSF/SPS Condition Assessments for Wastewater Asset Management Plan	EN1331	\$600,000	\$3,714	\$300,000				\$200,000	\$100,000	DC Reserves
Dyments Creek - SWMG DY01 Rehabilitation	EN1360.16.24	\$35,000	\$0	\$35,000	\$19,250	\$15,750				
Ferndale Drive South Watermain Replacement - Tiffin to Ardagh	EN1395.16.28	\$28,500	\$0	\$28,500			\$28,500			
Hotchkiss Creek Culvert Expansion - Anne, 55m North of Tiffin	EN1454.16.20	\$22,000	\$0	\$22,000	\$12,100	\$9,900				
WwTF Primary Anaerobic Digester Mixers	ES1031	\$320,000	\$280,112	\$39,888				\$39,888		
WwTF Drum Replacement - Rotary Drum Thickeners	EN1032	\$160,000	\$117,534	\$42,466				\$42,466		
WwTF New Biogas Booster	ES1036	\$30,000	\$15,647	\$14,353				\$14,353		
WwTF New PeCOD Unit for Determination of COD - Lab	ES1045	\$31,000	\$24,608	\$6,392				\$6,392		
				\$2,879,030	\$484,918	\$207,174	\$249,898	\$1,565,053	\$371,988	

APPENDIX "B"

Projects Requiring Additional Funding – Council Approval Required

Project Name	Project	Total Approved Budget	Total Project Cost to Date	Additional Funding Required	Funding				Comments
					Tax Capital Reserve	Wastewater Capital Reserve	Water Capital Reserve	DC Reserves	
Morrow Road Improvements - Ardagh to Patterson	EN1099	\$6,224,711	\$6,185,906	\$180,196	\$180,196				Additional funding required to pay for the transfer of utilities from the old hydro poles to the new poles so that the old poles can be removed. The funding will be distributed as follows: EN1099.18.20 (\$25,350), EN1099.18.22 (\$258,219), EN1099.18.26 (\$2,773), EN1099.23.10 (\$115,252). Funding will be returned as follows: EN1099.18.28 (\$221,398)
Little Lake Sewage Pump Station Upgrade	EN1122.18	\$1,068,300	\$994,127	\$270,000	\$270,000				The original scope from 2018 for this project was revised in 2020 to address recently identified capital upgrades that were identified through detailed condition assessments. Additionally, completion of geotechnical investigations have increased project requirements in relation to ground treatment and dewatering. These changes will result in additional engineering costs and city project management costs. Additional construction costs will be budgeted in the future once accurate cost estimates are developed for construction. The site needs to be restored since the construction phase has been deferred to 2022 to fix broken sidewalk, address grading issues, and clean up.
Lovers Creek New Bridge - Tollenda Mill, 150m West of Coxmill	EN1169.22.20	\$50,000	\$159,893	\$109,893	\$38,463			\$71,430	Gas relocation was complicated due to curvature in road and depth of directional drill required.
WwTF Alum System Upgrade at Secondary Clarifiers	EN1192.23	\$1,186,000	\$0	\$215,000		\$139,750		\$75,250	Additional funds are required to defray additional construction costs, engineering costs and city project management costs. The scope for this project was revised in 2020 to be compatible with the proposed configuration of the treatment processes that are planned over the next 10 years.
City Wide Cycling Network Program	EN1265.23.10	\$1,330,000	\$120,934	\$525,000	\$525,000				This project provides an important pedestrian connection on Hurst Drive to the Lakeshore waterfront pathway as well as Centennial Park and has approved funding from the province. As this project is located within a regulated area near Whiskey Creek, multiple storm water quality initiatives were required as part of the permitting process. Additionally, due to site constraints, the entire roadway also needed to be shifted in order to provide an appropriate width AODA complaint multi-use pathway. Asphalt resurfacing of the entire road surface was also included to address the poor roadway condition. These requirements were not anticipated at project initiation and have increased the overall project cost.
Lovers Creek Channel Rehabilitation - Adjacent to Brunton Park	EN1285.21.34	\$10,000	\$95	\$250,000	\$250,000				The additional funds are required in 2020 to advance property acquisition to 2020. Property for this project is required in order to restore the creek channel. Ongoing discussions with the current property owner have been positive. Advancing property funding phase for this project provides design efficiencies and will allow staff to advance project schedule.
Bayfield Street Water Tower - Repairs and Interior Lining Replacement	EN1309.23	\$890,000	\$26,777	\$172,000			\$172,000		The construction tender of this project was deferred from 2019 due to seasonal and supply constraints. The project team is increasing the project budget to account for escalation in construction prices and additional project management and engineering costs.
Grove Street East Watermain Replacement and Road Renewal - Duckworth to Fletcher	EN1355.16.10	\$20,000	\$0	\$80,000	\$16,000		\$64,000		Staff would like to advance field investigations by 1 year and initiate them in 2020. This will accelerate the Project schedule and provide cost savings by combining field investigations with other projects through economies of scale.
Alliance Boulevard Expansion - Bell Farm to Bell Farm	EN1435.16.10	\$22,000	\$0	\$100,000	\$100,000				Staff would like to advance field investigations by 1 year and initiate them in 2020. This will accelerate the Project schedule and provide cost savings by combining field investigations with other projects through economies of scale.
Holly Community Centre Building Automation System Replacement	FC1134.24.42	\$348,500	\$49,774	\$200,000	\$200,000				The original project scope and budget was based off a similar project completed at the East Bayfield Community Centre. A similar procurement was completed in January 2020, about 18 months after East Bayfield project was complete and the market value was significantly more than expected. A major change to the scope of work in order to reduce the budget is not feasible, thus we are requesting the additional funding to complete the full scope required to replace the failing building automation system at the Holly Community Centre.
				\$2,102,089	\$1,309,659	\$409,750	\$236,000	\$146,680	

APPENDIX "C"

Projects Requiring Additional Funding – Delegated Authority

Project Name	Project #	Total Approved Budget	Total Project Cost to Date	Additional Funding Required	Funding				Comments
					Tax Capital Holding Account	Water Capital Holding Account	Ww Capital Holding Account	DC Reserves	
Bayview Drive S. Essa to Caplan	EN1026.14.10	\$589,213	\$608,280	\$19,067	\$4,767			\$14,300	
Whiskey Creek Culvert Replacement - Brennan Ave	EN1034.23.20	\$41,629	\$43,982	\$2,353	\$2,353				
Essa Road ROW Replacement and Hotchkiss Creek Expansion - Anne to Gowan	EN1074	\$7,781,315	\$7,941,770	\$160,455	\$77,477	\$42,864		\$40,114	Funding adjustments as follows: EN1074.23.10 request \$46,641, EN1074.23.12 return \$219,534), EN1074.23.14 request \$92,188, EN1074.23.20 request \$278,189, EN1074.23.22 return \$27,106, EN1074.23.26 request \$254,562, EN1074.23.28 return \$264,486
McKay/Hwy 400 Interchange Class EA	EN1114.14	\$745,568	\$747,168	\$1,600	\$1,600				Development Charge Credits
Water Service and Backflow Prevention Upgrades for Parks and Open Spaces	EN1152.23.28	\$1,260,343	\$1,286,156	\$25,813		\$25,813			
Hwy 400 Impr Need Justif Study	EN1160.16.10	\$166,116	\$169,715	\$3,599				\$3,599	
Grove Street East Watermain Replacement - Davies to Cook	EN1171.23.28	\$573,676	\$586,250	\$12,574		\$12,574			
Infrastructure Master Plans/DC Technical Update	EN1177.14	\$3,430,221	\$3,757,052	\$326,831	\$62,468	\$4,982	\$7,721	\$251,660	
Wildflower Court Sewer System Expansion - Ardagh to End	EN1190.23.22	\$184,500	\$188,240	\$3,740	\$3,740				
Anne Street North Pavement Rehabilitation - Neelands to Sunnidale	EN1235.23.10	\$559,000	\$576,213	\$17,213	\$17,213				
St. Vincent Street Watermain Replacement - S of Highway 400 to Bell Farm	EN1247.23.28	\$223,933	\$223,947	\$14		\$14			
Parks and Recreation Strategic Master Plan Update	EN1249.12	\$107,530	\$116,857	\$9,327	\$3,031			\$6,296	
Climate Change Adaptation Strategy - Mileston 4 & 5	EN1290	\$131,208	\$131,591	\$383	\$128	\$128	\$128		
Polymer System Upgrade	ES1003	\$63,512	\$65,015	\$1,503				\$1,503	
Mapleview Drive East New Transmission Watermain - Huronia to Country	EN1159.23.28	\$1,737,654	\$1,737,666	\$12		\$12			
				\$584,484	\$172,777	\$86,386	\$9,352	\$315,969	