

**TOWN OF COBOURG  
CAPITAL BUDGET 2022 - 2024**

**ENVIRONMENTAL**

| PROJECT DESCRIPTION               | 2022 CAPITAL BUDGET |                   |          | 2023             |          | 2024             |          |
|-----------------------------------|---------------------|-------------------|----------|------------------|----------|------------------|----------|
|                                   | TOTAL COST          | REVENUE           | NET COST | TOTAL            | NET      | TOTAL            | NET      |
| Water Pollution Control Plants    |                     |                   |          |                  |          |                  |          |
| Archimedes Pump Repairs (P1)      | 50,000              | -50,000           | 0        | 0                | 0        | 0                | 0        |
| Thickener Tank Repairs            | 250,000             | -250,000          | 0        | 0                | 0        | 0                | 0        |
| Generator (P2)                    | 350,000             | -350,000          | 0        | 0                | 0        | 0                | 0        |
| Raw Sewage Pump (P2)              | 200,000             | -200,000          | 0        | 0                | 0        | 0                | 0        |
| Automated Bar Screen (P1)         | 200,000             | -200,000          | 0        | 0                | 0        | 0                | 0        |
| Blower (P1)                       | 200,000             | -200,000          | 0        | 0                | 0        | 0                | 0        |
| Raw Sewage Pump (P2)              | 35,000              | -35,000           | 0        | 0                | 0        | 0                | 0        |
| Forth Street Pump Station Upgrade | 150,000             | -150,000          | 0        | 300,000          | 0        | 0                | 0        |
| Monks Cover Pump Station Upgrade  | 150,000             | -150,000          | 0        | 0                | 0        | 300,000          | 0        |
| Spill Cleanup Trailer             | 15,000              | -15,000           | 0        | 0                | 0        | 0                | 0        |
| Portable Pump                     | 75,000              | -75,000           | 0        | 0                | 0        | 0                | 0        |
| Upgrade Gas Train (P2)            | 200,000             | -200,000          | 0        | 0                | 0        | 0                | 0        |
| Heat Exchanger Replacement (P1)   | 0                   | 0                 | 0        | 200,000          | 0        | 0                | 0        |
| Security Gates (P1 and P2)        | 0                   | 0                 | 0        | 200,000          | 0        | 0                | 0        |
| Archimedes Pump (P1)              | 0                   | 0                 | 0        | 200,000          | 0        | 0                | 0        |
| HX Pump (P2)                      | 0                   | 0                 | 0        | 30,000           | 0        | 0                | 0        |
| Digester Mix Pump (P2)            | 0                   | 0                 | 0        | 30,000           | 0        | 0                | 0        |
| WAS Pumps (P2)                    | 0                   | 0                 | 0        | 70,000           | 0        | 0                | 0        |
| Boiler Replacement (P2)           | 0                   | 0                 | 0        | 0                | 0        | 250,000          | 0        |
| Electrical (P2)                   | 0                   | 0                 | 0        | 0                | 0        | 250,000          | 0        |
| Alum Feed Pumps (P2)              | 0                   | 0                 | 0        | 0                | 0        | 75,000           | 0        |
| Aerated Grit Chamber (P2)         | 0                   | 0                 | 0        | 0                | 0        | 250,000          | 0        |
| Primary Clarifier (P2)            | 0                   | 0                 | 0        | 0                | 0        | 250,000          | 0        |
| Truck Replacement                 | 0                   | 0                 | 0        | 0                | 0        | 35,000           | 0        |
| <b>Total Environmental</b>        | <b>1,875,000</b>    | <b>-1,875,000</b> | <b>0</b> | <b>1,030,000</b> | <b>0</b> | <b>1,410,000</b> | <b>0</b> |

**TOWN OF COBOURG  
CAPITAL BUDGET 2022 - 2024**

**5 YEAR CAPITAL BUDGET JUSTIFICATION**

ACCOUNT #

|  |   |             |             |
|--|---|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>The upper and lower bearings of the Archimedes (Screw) Pumps are only expected to last 6 - 7 years. The bearings at Plant #1 are now 13 years old. The bearings on the North Pump failed in 2021 and required emergency replacement. The bearings on the South Pump are the same age and are likely to fail as well if they are not replaced soon. The gear box is original and also needs to be replaced.<br><br>Public Consultation Process <span style="float: right;"><b>No</b></span> |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |   |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Archimedes Pump Repairs - Plant #1                                     |   |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>  |             |             |
|  | <b>2022</b>   | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER | 50,000  |             |             |
| <b>6. NET REQUIREMENTS:</b><br><br><b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER    | 50,000  | 0           | 0           |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0   | 0           | 0           |

**TOWN OF COBOURG  
CAPITAL BUDGET 2022 - 2024**

**5 YEAR CAPITAL BUDGET JUSTIFICATION**

ACCOUNT #

| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>The Thickener Tank is used to concentrate microbial waste from the aerobic section of the treatment system. The sludge rake, skimmer & center draft tube have already failed due to corrosion and the tank has been taken out of service. These components need to be replaced in order to bring the thickener back into operation. Without the thickener, the plant is operating at a reduced capacity and causes other processes to have to work harder and potentially fail earlier.<br><br>Public Consultation Process <span style="float: right;"><b>No</b></span>   |   |   |      |      |      |      |  |         |  |  |   |         |   |   |                                  |   |   |   |
|--|--|---|---|------|------|------|------|--|---------|--|--|---|---------|---|---|----------------------------------|---|---|---|
| <b>DEPARTMENT:</b> Environmental Services  |  |   |   |      |      |      |      |  |         |  |  |   |         |   |   |                                  |   |   |   |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Thickener Tank Repairs   | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b><br><br><table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;"></th> <th style="width: 33%; text-align: center;">2022</th> <th style="width: 33%; text-align: center;">2023</th> <th style="width: 33%; text-align: center;">2024</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"> <b>5. EXPENDITURES</b><br/><br/>           CONTRACTUAL<br/>           CAPS BASED ON \$<br/> <b>DIRECT REVENUES</b><br/>           GRANTS &amp; SUBSIDIES<br/>           OTHER         </td> <td style="text-align: center; vertical-align: top;">250,000</td> <td></td> <td></td> </tr> <tr> <td style="vertical-align: top;"> <b>6. NET REQUIREMENTS:</b><br/><br/> <b>TO BE FINANCED FROM:</b><br/>           DEBENTURES<br/>           OWNERS<br/>           RESERVES - Sewer<br/>           OTHER         </td> <td style="text-align: center; vertical-align: top;">250,000</td> <td style="text-align: center; vertical-align: top;">0</td> <td style="text-align: center; vertical-align: top;">0</td> </tr> <tr> <td style="vertical-align: top;"> <b>7. ANNUAL TAX REQUIREMENT</b> </td> <td style="text-align: center; vertical-align: top;">0</td> <td style="text-align: center; vertical-align: top;">0</td> <td style="text-align: center; vertical-align: top;">0</td> </tr> </tbody> </table> |   |   |      | 2022 | 2023 | 2024 | <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER | 250,000 |  |  | <b>6. NET REQUIREMENTS:</b><br><br><b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER | 250,000 | 0 | 0 | <b>7. ANNUAL TAX REQUIREMENT</b> | 0 | 0 | 0 |
|  |  |   |   | 2022 | 2023 | 2024 |      |  |         |  |  |   |         |   |   |                                  |   |   |   |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER | 250,000  |   |   |      |      |      |      |  |         |  |  |   |         |   |   |                                  |   |   |   |
| <b>6. NET REQUIREMENTS:</b><br><br><b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER    | 250,000  | 0 | 0 |      |      |      |      |  |         |  |  |   |         |   |   |                                  |   |   |   |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0  | 0 | 0 |      |      |      |      |  |         |  |  |   |         |   |   |                                  |   |   |   |
| <b>2. COMMITMENTS MADE:</b>  |  |   |   |      |      |      |      |  |         |  |  |   |         |   |   |                                  |   |   |   |

**TOWN OF COBOURG  
CAPITAL BUDGET 2022 - 2024**

**5 YEAR CAPITAL BUDGET JUSTIFICATION**

ACCOUNT #

|  |  |             |             |
|--|--|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br>The backup power generator at Plant #2 began experiencing malfunctions several years ago but was able to be repaired. While the generator is currently operating satisfactorily, servicing costs are increasing and new parts are no longer available due the age of the generator (38 years old). It is recommended that a new diesel power backup generator be purchased for Plant #2. The new generator should be upgraded from 300 to 600 kW to accommodate the new SBR and upcoming Plant expansion. |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |  |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Backup Power Generator - Plant #2                                      | Public Consultation Process <span style="float: right;"><b>No</b></span>   |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>   |             |             |
|  | <b>2022</b>  | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER | 350,000  |             |             |
| <b>6. NET REQUIREMENTS:</b>  | 350,000  | 0           | 0           |
| <b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER                                       | -350,000   |             |             |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0  | 0           | 0           |

**TOWN OF COBOURG  
CAPITAL BUDGET 2022 - 2024**

**5 YEAR CAPITAL BUDGET JUSTIFICATION**

ACCOUNT #

|  |  |             |             |
|--|--|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>The raw sewage pumps at Plant #2 were all original equipment from 1984. In 2018, the systematic replacement of the pumps became necessary when efficiency fell below 50%. One of the pumps was replaced in 2019 and another in 2020. Replacement of the third pump will allow Plant #2 to handle additional flows from a second SBR (online in Q4/2022) & new subdivisions in the east end.<br><br>Public Consultation Process <span style="float: right;"><b>No</b></span> |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |  |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Raw Sewage Pump (3rd of 3) - Plant #2                                  |  |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>   |             |             |
|  | <b>2022</b>  | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER | 200,000  |             |             |
| <b>6. NET REQUIREMENTS:</b><br><br><b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER    | 200,000  | 0           | 0           |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0  | 0           | 0           |

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|--|---|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br>During high flow events, the current 6 mm perforated screen cannot keep up with the flow volume and the emergency gate to the spare channel opens. The spare channel holds a 20 mm bar screen that must be manually cleaned. If an alarm call is received during the night, the manual screen often plugs up before an Operator can respond. This leads to raw sewage overflowing the upper channel and spilling onto the floor of the lower level. Automating the screen will keep the sewage flowing and reduce the need for an Operator response. |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |   |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Automated 9 mm Bar Screen - Plant #1                                   | Public Consultation Process <span style="float: right;"><b>No</b></span>  |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>  |             |             |
|  | <b>2022</b>   | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER | 200,000   |             |             |
| <b>6. NET REQUIREMENTS:</b>  | 200,000   | 0           | 0           |
| <b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER                                       | -200,000  |             |             |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0   | 0           | 0           |

**TOWN OF COBOURG  
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|   |  |             |             |
|---|--|-------------|-------------|
| <b>DIVISION:</b> Public Works<br><b>DEPARTMENT:</b> Environmental Services<br><b>1. PROJECT NAME &amp; DESCRIPTION</b><br>Atlas Copco Blower - Plant #1 | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br>Plant #1 replaced one of its three Aeration Blowers in 2018. The reduced electricity consumption of the new blower reduced the facilities electrical expenses by ~\$100,000 annually. The single Atlas Copco blower has been operating almost continuously since its installation. Adding a second blower will allow cycling between two blowers and permit preventative maintenance without having to operate one of the less efficient HSI blowers.<br><br>Public Consultation Process <span style="float: right;"><b>No</b></span> |             |             |
| <b>2. COMMITMENTS MADE:</b>   | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>   |             |             |
|   | <b>2022</b>  | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER                                  | 200,000  |             |             |
| <b>6. NET REQUIREMENTS:</b>   | 200,000  | 0           | 0           |
| <b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER  | -200,000   |             |             |
| <b>7. ANNUAL TAX REQUIREMENT</b>  | 0  | 0           | 0           |

**TOWN OF COBOURG  
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|  |  |             |             |
|--|--|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>The RAS pumps at Plant #2 were all original equipment installed in 1984. Two have already been replaced and this will be the third and final RAS pump to be replaced at Plant #2.<br><br>Public Consultation Process <span style="float: right;"><b>No</b></span> |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |  |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Return Activated Sludge (RAS) Pump - Plant #2                          |  |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>   |             |             |
|  | <b>2022</b>  | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER | 35,000   |             |             |
| <b>6. NET REQUIREMENTS:</b><br><br><b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER    | 35,000   | 0           | 0           |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0  | 0           | 0           |



**TOWN OF COBOURG  
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**5 YEAR CAPITAL BUDGET JUSTIFICATION**

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|  |  |             |             |
|--|--|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b>  |             |             |
| <b>DEPARTMENT:</b> Environmental Services  | The Forth St Pump Station was constructed in 1953 and is the oldest of the Town's five sanitary Pump Stations. The bricks are deteriorating, the pumps and piping require replacement and the location and its capacity needs to be re-evaluated to determine whether the station needs to be moved further south to combine the Lakeview wetwell (adjacent to Forth St Wetwell) and capture the Cedermere/Tay area (currently on septic tanks). CIMA to conduct assessment and make recommendations on upgrades to the Pump Station and make recommendations on upgrades to the Pump Station and the necessary upgrades will be tendered in 2023. |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Forth St Pump Station Upgrade  | Public Consultation Process <span style="float: right;"><b>Yes</b></span>  |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>   |             |             |
|  | <b>2022</b>  | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER | 150,000  | 300,000     |             |
| <b>6. NET REQUIREMENTS:</b>  | 150,000  | 300,000     | 0           |
| <b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER                                       | -150,000   | -300,000    |             |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0  | 0           | 0           |

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|--|--|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>The Monks Cover Pump Station itself is in good condition. The wetwell however requires new grating and larger capacity pumps. New homes are being added to the collection system feeding the Monks Cover Pump Station, so pump capacity may become an issue. CIMA has been hired to assess the needs of the station and provide recommendations.<br>Based upon the assessment conducted by CIMA in 2022, the necessary upgrades will be tendered and implemented in 2024. |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |  |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Monk Cove Pump Station Upgrade   | Public Consultation Process <span style="float: right;"><b>Yes</b></span>  |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>   |             |             |
|  | <b>2022</b>  | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER | 150,000  |             | 300,000     |
| <b>6. NET REQUIREMENTS:</b>  | 150,000  | 0           | 300,000     |
| <b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER                                       | -150,000   |             | -300,000    |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0  | 0           | 0           |

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| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>Environmental spills occur unexpectedly & require a rapid response to mitigate damage to the environment. Purchasing a small trailer and stocking it with a full array of spill cleanup tools and equipment will provide a mobile warehouse of booms, absorbents and equipment for cleanup and sampling, that can be moved in proximity to the spill site. Having all the required equipment in a single location will allow for the fastest response time and will minimize the impact of the spill on the environment. ~14' enclosed trailer. Costs will include racks and equipment to stock the trailer initially. |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |   |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Spill Cleanup Trailer  | Public Consultation Process <span style="float: right;"><b>No</b></span>  |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>  |             |             |
|  | <b>2022</b>   | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER | 15,000  |             |             |
| <b>6. NET REQUIREMENTS:</b><br><br><b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER    | 15,000  | 0           | 0           |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0   | 0           | 0           |

**TOWN OF COBOURG  
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|--|--|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>During the construction of the Tertiary Filter Building at Plant #1 in 2009, a surplus pump (i.e. 8" Gorman Rupp Trash Pump) was included in the contract but was not used in the final design. Rather than allow a new pump to sit idle, it is proposed that the pump be mounted on a trailer, coupled with a generator and used as a portable pump. A pump of this size would be ideal for pumping down tanks at the Wastewater Treatment Plants. |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |  |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Portable Pump  | Public Consultation Process <span style="float: right;"><b>No</b></span>   |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>   |             |             |
|  | <b>2022</b>  | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER | 75,000   |             |             |
| <b>6. NET REQUIREMENTS:</b><br><br><b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER    | 75,000   | 0           | 0           |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0  | 0           | 0           |

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|--|--|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>A TSSA inspection of the Digester Building at Plant #2 in 2021 revealed several aspects of the gas train that did not meet the current Gas Code. The gaskets, piping, drip traps, thermal valves and flame arresters all need to be upgraded. |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |  |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Upgrade Gas Train - Plant #2   | Public Consultation Process <span style="float: right;"><b>No</b></span>   |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>   |             |             |
|  | <b>2022</b>  | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER | 200,000  |             |             |
| <b>6. NET REQUIREMENTS:</b><br><br><b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER    | 200,000  | 0           | 0           |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0  | 0           | 0           |

**TOWN OF COBOURG  
CAPITAL BUDGET 2022 - 2024**

**5 YEAR CAPITAL BUDGET JUSTIFICATION**

ACCOUNT #

|  |  |             |             |
|--|--|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>Sludge from the Primary Digester must be heated to 35 C to provide ideal growth conditions for the anaerobic microorganisms. The Heat Exchanger at Plant #1 has reached its useful life and needs to be replaced. The 2014 Asset Management Plan identified its replacement date as 2018. When heat exchangers fail, sludge cannot be digested which is necessary in order to spread sludge on farmers fields. Undigested sludge is very expensive to dispose of. |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |  |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Heat Exchanger - Plant #1  | Public Consultation Process <b>No</b>  |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>   |             |             |
|  | <b>2022</b>  | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER |  | 200,000     |             |
| <b>6. NET REQUIREMENTS:</b>  | 0  | 200,000     | 0           |
| <b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER                                       |  | -200,000    |             |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0  | 0           | 0           |

**TOWN OF COBOURG  
CAPITAL BUDGET 2022 - 2024**

**5 YEAR CAPITAL BUDGET JUSTIFICATION**

ACCOUNT #

|   |  |             |             |
|---|--|-------------|-------------|
| <b>DIVISION:</b> Public Works<br><hr/> <b>DEPARTMENT:</b> Environmental Services<br><hr/> <b>1. PROJECT NAME &amp; DESCRIPTION</b><br>Security Gates - Plants 1 & 2 | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br>The front gates at both Wastewater Treatment facilities are in dark, isolated areas. Operators have to leave the safety of their vehicles to lock/unlock the gates, often in darkness. Installation of electronically-controlled power gates will provide safer entry/exit to the from the facilities. A proper security gate will also permit electronic tracking of all personnel in/out facility. When driveways are redone at the plants, ideally this is when the gates are installed.<br><br>Public Consultation Process <span style="float: right;"><b>No</b></span> |             |             |
| <b>2. COMMITMENTS MADE:</b>   | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>   |             |             |
|   | <b>2022</b>  | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER  |  | 200,000     |             |
| <b>6. NET REQUIREMENTS:</b>   | 0  | 200,000     | 0           |
| <b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER  |  | -200,000    |             |
| <b>7. ANNUAL TAX REQUIREMENT</b>  | 0  | 0           | 0           |

**TOWN OF COBOURG  
CAPITAL BUDGET 2022 - 2024**

**5 YEAR CAPITAL BUDGET JUSTIFICATION**

ACCOUNT #

|  |  |             |             |
|--|--|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>This pump has been in place since 1969 (53 years). It is the third of three Archimedes Pumps in use at Plant #1. The other two pumps were replaced in 2008 and 2009. Once these pumps were installed, the third pump has rarely been used due to its efficiency. Replacement of this third pump has become necessary to sustain the Plants flow capacity whenever the other pumps are taken out of service for maintenance. |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |  |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Archimedes (Screw) Pump - Plant #1                                     | Public Consultation Process <span style="float: right;"><b>No</b></span>   |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>   |             |             |
|  | <b>2022</b>  | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER |  | 200,000     |             |
| <b>6. NET REQUIREMENTS:</b>  | 0  | 200,000     | 0           |
| <b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER                                       |  | -200,000    |             |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0  | 0           | 0           |



**TOWN OF COBOURG  
CAPITAL BUDGET 2022 - 2024**

**5 YEAR CAPITAL BUDGET JUSTIFICATION**

ACCOUNT #

|  |  |             |             |
|--|--|-------------|-------------|
| <b>DIVISION:</b> Public Works<br><b>DEPARTMENT:</b> Environmental Services<br><b>1. PROJECT NAME &amp; DESCRIPTION</b><br>Heat Exchanger Pump - Plant #2 | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br>The pump is 25 years old and is in need of replacement. It is one of several pumps at Plant #2 that are reaching the end of their life expectancy and need to be replaced prior to failing. Waiting until this pump actually fails would create operational difficulties for the facility and may lead to a violation of the Plant's ECA (Environmental Compliance Approval).<br><br>Public Consultation Process <span style="float: right;"><b>No</b></span> |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>   |             |             |
|  | <b>2022</b>  | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER                                   |  | 30,000      |             |
| <b>6. NET REQUIREMENTS:</b>  | 0  | 30,000      | 0           |
| <b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER   |  | -30,000     |             |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0  | 0           | 0           |

**TOWN OF COBOURG  
CAPITAL BUDGET 2022 - 2024**

**5 YEAR CAPITAL BUDGET JUSTIFICATION**

ACCOUNT #

|  |   |             |             |
|--|---|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>This pump is 25 years old and is in need of replacement. It is one of several pumps at Plant #2 that are reaching the end of their life expectancy and need to be replaced prior to failing. Waiting until this pump actually fails would create operational difficulties for the facility and may lead to a violation of the Plant's ECA (Environmental Compliance Approval).<br><br>Public Consultation Process <span style="float: right;"><b>No</b></span> |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |   |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Digester Mixing Pump - Plant #2  |   |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>  |             |             |
|  | <b>2022</b>   | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER |   | 30,000      |             |
| <b>6. NET REQUIREMENTS:</b><br><br><b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER    | 0   | 30,000      | 0           |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0   | 0           | 0           |

**TOWN OF COBOURG  
CAPITAL BUDGET 2022 - 2024**

**5 YEAR CAPITAL BUDGET JUSTIFICATION**

ACCOUNT #

|  |   |             |             |
|--|---|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>The Waste Activated Sludge (WAS) pumps are used to either recycle back into the Aeration Tanks or remove them from the system by discharging it into the Primary Clarifiers. There are two (2) WAS pumps that are original equipment from 1984 (40 years old) and need to be replaced. |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |   |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Waste Activated Sludge (WAS) Pump Replacement                          | Public Consultation Process <span style="float: right;"><b>No</b></span>  |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>  |             |             |
|  | <b>2022</b>   | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER |   | 70,000      |             |
| <b>6. NET REQUIREMENTS:</b><br><br><b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER    | 0   | 70,000      | 0           |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0   | 0           | 0           |

**TOWN OF COBOURG  
CAPITAL BUDGET 2022 - 2024**

**5 YEAR CAPITAL BUDGET JUSTIFICATION**

ACCOUNT #

|  |  |             |             |
|--|--|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>The Clever Brooks Boiler was the original installed at Plant #2 in 1984 (40 yrs. old). In 2003, Plant #2 added a second Anaerobic Digester but did not increase the boiler capacity. The boiler requires replacement due to its age but should be upgraded to a capacity better able to handle the added volume of the second digester. |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |  |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Boiler Replacement - Plant #2  | Public Consultation Process <span style="float: right;"><b>No</b></span>   |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>   |             |             |
|  | <b>2022</b>  | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER |  |             | 250,000     |
| <b>6. NET REQUIREMENTS:</b>  | 0  | 0           | 250,000     |
| <b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER                                       |  |             | -250,000    |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0  | 0           | 0           |

**TOWN OF COBOURG  
CAPITAL BUDGET 2022 - 2024**

**5 YEAR CAPITAL BUDGET JUSTIFICATION**

ACCOUNT #

|  |  |             |             |
|--|--|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>The motor control centers and wiring from the initial construction in 1984 need to be upgraded to current standards. The Watson Full Cost Recovery Report specified replacement in 2009, however, annual inspections indicated that electrical systems were still adequate. The MCC's and wiring are now at an age where replacement is necessary. Due to the scope of this undertaking this upgrade is being prioritized and upgraded in phases beginning in 2024. |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |  |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Electrical Upgrades  | Public Consultation Process <span style="float: right;"><b>No</b></span>   |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>   |             |             |
|  | <b>2022</b>  | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER |  |             | 250,000     |
| <b>6. NET REQUIREMENTS:</b>  | 0  | 0           | 250,000     |
| <b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER                                       |  |             | -250,000    |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0  | 0           | 0           |

**TOWN OF COBOURG  
CAPITAL BUDGET 2022 - 2024**

**5 YEAR CAPITAL BUDGET JUSTIFICATION**

ACCOUNT #

|  |   |             |             |
|--|---|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>Alum is pumped into the wastewater stream to remove phosphorus, which is a restricted pollutant specified in the Plant #2 Environmental Compliance Approval (ECA). The existing alum feed pumps are due for replacement. There are (2) duty and one (1) standby pump to be replaced. |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |   |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Alum Feed Pumps (3)  | Public Consultation Process <span style="float: right;"><b>No</b></span>  |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>  |             |             |
|  | <b>2022</b>   | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER |   |             | 75,000      |
| <b>6. NET REQUIREMENTS:</b>  | 0   | 0           | 75,000      |
| <b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER                                       |   |             | -75,000     |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0   | 0           | 0           |

**TOWN OF COBOURG  
CAPITAL BUDGET 2022 - 2024**

**5 YEAR CAPITAL BUDGET JUSTIFICATION**

ACCOUNT #

|  |  |             |             |
|--|--|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>The Aerated Grit Chamber at Plant #2 was part of the original installation in 1984. The Plant flow has increased to a level where the Aerated Grit Chamber capacity is insufficient to adequately remove the grit. As more subdivisions are tied into the Plant #2 sanitary collection system, the need to upgrade the grit removal system becomes more critical. Given the physical limitations of the current system, it will be necessary to alter the concrete infrastructure to increase its volume or tied it in to an off-line, stand alone grit classifier.<br><br>Public Consultation Process <span style="float: right;"><b>No</b></span> |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |  |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Aerated Grit Chamber - Plant #2  |  |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>   |             |             |
|  | <b>2022</b>  | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER |  |             | 250,000     |
| <b>6. NET REQUIREMENTS:</b><br><br><b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER    | 0  | 0           | 250,000     |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0  | 0           | 0           |
|  |  |             | -250,000    |

**TOWN OF COBOURG  
CAPITAL BUDGET 2022 - 2024**

**5 YEAR CAPITAL BUDGET JUSTIFICATION**

ACCOUNT #

|  |  |             |             |
|--|--|-------------|-------------|
| <b>DIVISION:</b> Public Works  | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>The Primary Clarifier's mechanical sweep arms and center column are 40 years old and need to be replaced. |             |             |
| <b>DEPARTMENT:</b> Environmental Services  |  |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Primary Clarifier - Plant #2   | Public Consultation Process <span style="float: right;">No</span>  |             |             |
| <b>2. COMMITMENTS MADE:</b>  | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>   |             |             |
|  | <b>2022</b>  | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER |  |             | 250,000     |
| <b>6. NET REQUIREMENTS:</b>  | 0  | 0           | 250,000     |
| <b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Sewer<br>OTHER                                       |  |             | -250,000    |
| <b>7. ANNUAL TAX REQUIREMENT</b>   | 0  | 0           | 0           |



**TOWN OF COBOURG  
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**5 YEAR CAPITAL BUDGET JUSTIFICATION**

ACCOUNT #

|   |   |             |             |
|---|---|-------------|-------------|
| <b>DIVISION:</b> Public Works   | <b>3. PROJECT DETAIL &amp; JUSTIFICATION:</b><br><br>In accordance with the Town's Vehicle Replacement By-law 078-2014, the age of truck #13 indicates that it would be due for replacement in 2022. As required, the truck has been assessed and determined that the cost of repairs to keep the vehicle operational were not significant and therefore the vehicle will be reassessed annually before it is budgeted for replacement.<br><br>Public Consultation Process <span style="float: right;"><b>No</b></span> |             |             |
| <b>DEPARTMENT:</b> Environmental Services   |   |             |             |
| <b>1. PROJECT NAME &amp; DESCRIPTION</b><br><br>Truck Replacement   |   |             |             |
| <b>2. COMMITMENTS MADE:</b>   | <b>4. EFFECTS ON FUTURE OPERATING BUDGETS:</b>  |             |             |
|   | <b>2022</b>   | <b>2023</b> | <b>2024</b> |
| <b>5. EXPENDITURES</b><br><br>CONTRACTUAL<br>CAPS BASED ON \$<br><b>DIRECT REVENUES</b><br>GRANTS & SUBSIDIES<br>OTHER            |   |             | 35,000      |
| <b>6. NET REQUIREMENTS:</b><br><br><b>TO BE FINANCED FROM:</b><br>DEBENTURES<br>OWNERS<br>RESERVES - Vehicle Replacement<br>OTHER | 0   | 0           | 35,000      |
| <b>7. ANNUAL TAX REQUIREMENT</b>  | 0   | 0           | -35,000     |
|   | 0   | 0           | 0           |