



# Drinking Water System

Financial Plan #110-301

July 2, 2020



Sharratt Water Management Ltd.  
Sustainable Water Management Specialists

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## 1.0 Introduction

The Township of Southgate has authorized Sharratt Water Management Ltd. (SWML) to develop the Financial Plan for the Dundalk drinking water system. A renewal of the drinking water system is now required and a financial plan must be prepared, approved by Council, and submitted to the provincial Ministry of Municipal Affairs and Housing, in order to obtain a licence renewal.

This Financial Plan has been prepared in accordance with the Financial Plan regulation (O. Reg. 453/07) made under the Safe Drinking Water Act, as well as the provisions of the financial planning guidelines published by the Ministry of the Environment (MOE) in August 2007 entitled “Toward Financially Sustainable Drinking-Water and Wastewater Systems”.

In order to develop this financial plan, water system capital needs have been projected in current dollars and then inflated to the year 2026. In addition, operating costs have been inflated and projected to 2026. The revenue needed to support the operating and capital plan is laid out in a funding plan that relies on user fees based on rates, connection charges and some other sundry sources of revenue. Development charges are used to fund projects that accommodate growth. User fees from rates are set so that adequate reserves are developed in order to fund future capital and major maintenance expenses to at least 2026 and to maintain reserves at a sustainable level well into the future. This projection is based on the planning assumptions concerning asset lifetimes, the future inflation and interest rates as well as the level of ongoing asset maintenance.

The Financial Plan is also based on the tangible capital asset information that the Township generated for Dundalk in accordance with the Public Sector Accounting Board (PSAB) standard PS 3150 requirements. The Financial Plan includes a projection of financial and non-financial tangible capital assets to the year 2026, the six-year planning horizon required by Reg. 453/07. Capital renewal costs were projected to 2119 to determine the long run sustainability of the user fees at current levels of annual increase. It was also used to determine the user fee increase levels that would be fully life cycle sustainable to 2119.

### 1.1 Legislative Context to Financial Planning

There have been a number of legislative initiatives affecting water system management and operations over the past decade. These initiatives were a result of the water borne illness tragedy in Walkerton in 2000. Following this event, the Government of Ontario established a public inquiry chaired by the Honourable Dennis O'Connor to look into the

tragedy. The Inquiry Report recommended a comprehensive approach to the delivery of safe drinking water in Ontario.

The MOE has responded to the Inquiry recommendations by making legislative changes. One change directly related to the development of this Financial Plan was the passage of the Safe Drinking Water Act, 2002 (SDWA). It requires owners of a municipal drinking water system to apply for and initially obtain a Municipal Drinking Water Licence and to renew the licence at preset times. Five elements must be in place in order for the owner of a drinking water system to obtain a licence including a financial plan:

- 1) A Drinking Water Works Permit to establish or alter a drinking-water system;
- 2) An accepted Operational Plan. The Drinking Water Quality Management Standard (DWQMS) is the standard upon which operational plans are based. The plan documents an operating authority's quality management system (QMS).
- 3) An Accredited Operating Authority. A third party audit of an operating authority's QMS will be the basis for accreditation.
- 4) A Permit to Take Water.
- 5) A Financial Plan that must be prepared and approved in accordance with the prescribed requirements in the Financial Plans Regulation.

Regulation 453/07 of the Safe Drinking Water Act was passed in 2007 and contains several provisions affecting the preparation of Financial Plans pertaining to the licencing of a water system:

- A person who makes an application under the Act for a municipal drinking water licence shall, before making the application, prepare and approve financial plans for the system that satisfy the requirements of O. Reg. 453/07, S. 1(1).
- The Financial Plan must be approved by a resolution that is passed by the Council of the municipality
- The Financial Plan must apply to a period of at least six years with the first year to which the financial plans must apply must be the year in which the drinking water system's existing municipal drinking water licence would otherwise expire.
- Once a system is licensed, the municipality's Financial Plan is required to be updated every 5 years, in conjunction with every application for license renewal.

## 1.2 Accounting and Policy Changes

In June 2006, the Public Sector Accounting Board (PSAB) of the Canadian Institute of Chartered accountants approved new municipal financial accounting and reporting standards requiring that tangible capital assets (TCA), including components of the water system, be included in municipal financial statements. The new accounting standard PS 3150 came into effect on January 1, 2009. This provides for a sharper focus on the depreciation of the capital asset base of the water system and the need to plan for renewal and replacement on a timely basis. This data is an integral component of the financial statements included in this Financial Plan.

The Clean Water Act 2006 targets the protection of drinking water supplies through the development of collaborative, locally driven, science and watershed based source protection plans. According to the MOE financial planning guidelines, Financial Plans should include source water protection costs related to the provision of water services. Utilities are encouraged to have, at minimum, estimates of any current source protection costs as a separate cost item by the time that their Financial Plans are required in order to effectively align with the anticipated approval timelines for source protection plans.

In June 2007, the government of Ontario proposed a lead action plan. The Financial Plans regulation contains requirements for municipalities to include in their Financial Plans, the costs associated with replacing lead service pipes in the drinking water system.

## 1.3 Dundalk Water System

Dundalk is a community with a population of approximately 2,046, according to the 2016 Statistics Canada census, and is situated in Southgate Township of Grey County. The water system had 886 water connections and 869 wastewater connections at the end of 2019. All water users in Dundalk are metered. Users all pay a two-part water and a two-part wastewater rate. The fixed rate increases for larger meter sizes in recognition of the higher costs of larger meters. All users with same meter size pay the same water and wastewater rates. The water and wastewater rates for 2020 are set out in Table 1.1:

**Table 1.1 Dundalk Water/Wastewater Rates (2020)**

Fixed Portion of the Rate	Monthly \$	
	Water	Wastewater
Meter Size		
5/8x3/4 inch	26.87	62.52
1 inch	67.17	156.30
1.5 inch	134.34	312.59
2 inch	214.95	500.15
3 inch	429.90	1000.30
4 inch	671.72	1562.97
<b>Volumetric Portion of the Rate</b>		
Cost per Cubic Metre (M3) for all Water Used	\$ 1.79	1.24

## 2.0 Operating Plan

The operating plan details the recurring minor maintenance as well as the capital renewal and major maintenance investment costs required to sustain the drinking water system. These costs are detailed in the attachments to this Financial Plan document. Some key assumptions are set out below.

### 2.1 Operations Expenses

Operating costs such as labour, chemicals, insurance and other costs are projected to increase at 2-3% per annum.

### 2.2 Capital Renewal and Major Maintenance Expenses

Capital renewal costs have been projected to 2026 and funding needs for these costs have been included in the user fee revenue estimates for 2020-26. The system is expected to add 82 new connections for each year for 2020-26 and 62 from 2027 onwards. A new water tower is proposed for construction in 2022, and in 2026, the Main street west oversizing is proposed. A new well, D6, is proposed for 2029. In 2050, the mains installed in 1960 are due for replacement. In 2056, the buildings and major well components for well D4 are scheduled for renewal based on their age.

The intent of the operating plan is to ensure that funding will be available, when needed, at least for the projected capital costs between 2020 and 2026, and preferably a substantial time beyond. Capital costs are projected to increase at 3.0% per year to 2026 and, in fact, to 2119. The capital renewal needs are set out in appendix A to the Water Rate Report dated July 2, 2020.

### 2.3 Debt Servicing Costs

The water system has a loan for \$314,526 for the existing user portion of the main street east oversizing project that has commenced in December 2019. It has an interest rate of 2.5% and a 10-year term.

### 2.4 Lead Replacement Costs

There is no lead present in the system. Approximately \$600 is spent on routine lead testing and system surveillance each year.

### 2.5 Source Water Protection Costs

The Township of Southgate has implemented its source water protection program. The Public Works Manager is the designed Risk Management Official and the annual

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activities undertaken are covered in the manager's wages. Publicity and educational materials as well as signage are kept up to date in stock. \$2,000 has been budget to replenish stocks over the next six years.

### 3.0 Funding Plan

The funding plan lays out a plan on how the Township will generate the required funds to meet the expenditure requirements detailed in the operating plan. The funding plan is detailed in the Draft Rate Report dated July 2, 2020. The funding plan proposed will rely primarily on user fees, meter charges for new users, connection fees and various sundry charges. Development charges will fund a major portion of projects that accommodate growth. Some key assumptions and results are presented below.

#### 3.1 Government Grants

No allowance has been made for government grants in the 2020-2026 periods. Should grants be obtained, the funds displaced would likely be placed in the reserves.

#### 3.2 Debt

The Township currently has one loan, outstanding referenced above, that commenced in December 2019 for \$314,526. One additional loan is projected for 2022 to pay for the existing user portion of the cost of the water tower. The loan is projected to be for \$594,000 at 2.5% per annum over 10 years. No further loans are anticipated.

#### 3.3 Required User Fees

Based on this funding plan, the Dundalk user fees are projected increase at 7.0% per year from 2021 to 2026, 4% from 2027 to 2070 and then 2.5% 2071-2119. Included in the user fee increase is provision for the inflation of operating costs of 2 to 3% per year, and inflation of 3% per year for projected capital costs. The proposed schedule of user fee increases funds all routine projected operating costs, and provides sufficient revenue to cover the currently projected capital asset renewal and replacement needs to 2119.

### 4.0 Continuous Improvement

Provincial regulation 453/07 requires that the Financial Plans be updated every 5 years, along with the request for the renewal of the Drinking Water Licence. This on-going update will assist in revisiting the assumptions made to develop the operating and funding plans as well as re-assessing the need for capital renewal and major maintenance expenditures.

## 5.0 Financial Plan Summary

This section provides a summary of principal features concerning the current and future state of the water system contained in the projected Financial Statements over 7 years (2020-2026) in compliance with O. Reg. 453. The detailed financial statements are set out in tabular form in Section 6. The notes regarding the various line entries in financial statements are presented at the end of the financial statement section.

### 5.1 Statement of Financial Position (Table 6.1)

One important feature of a water system is a statement of its net financial assets/debt. A positive number indicates that the system has the resources to deal with future capital and other needs. A negative number indicates that past capital and other investments must be financed from future revenues. The Dundalk water system's net financial assets are shown in Figure 5.1:

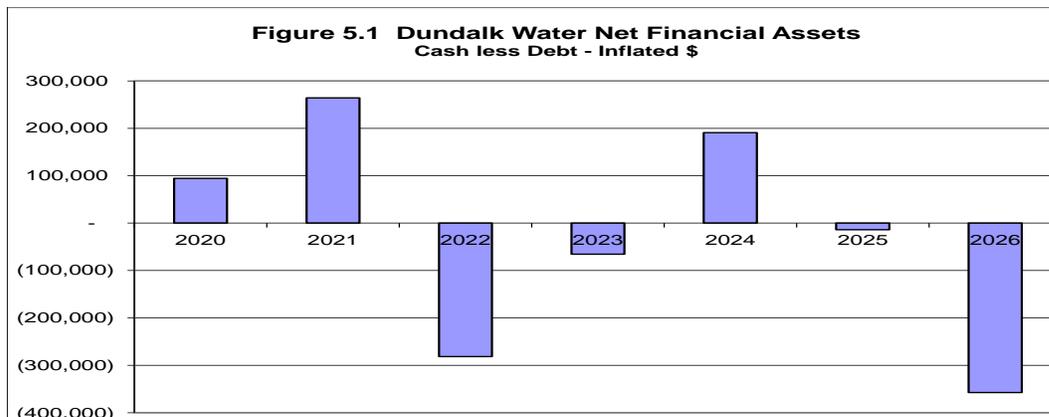
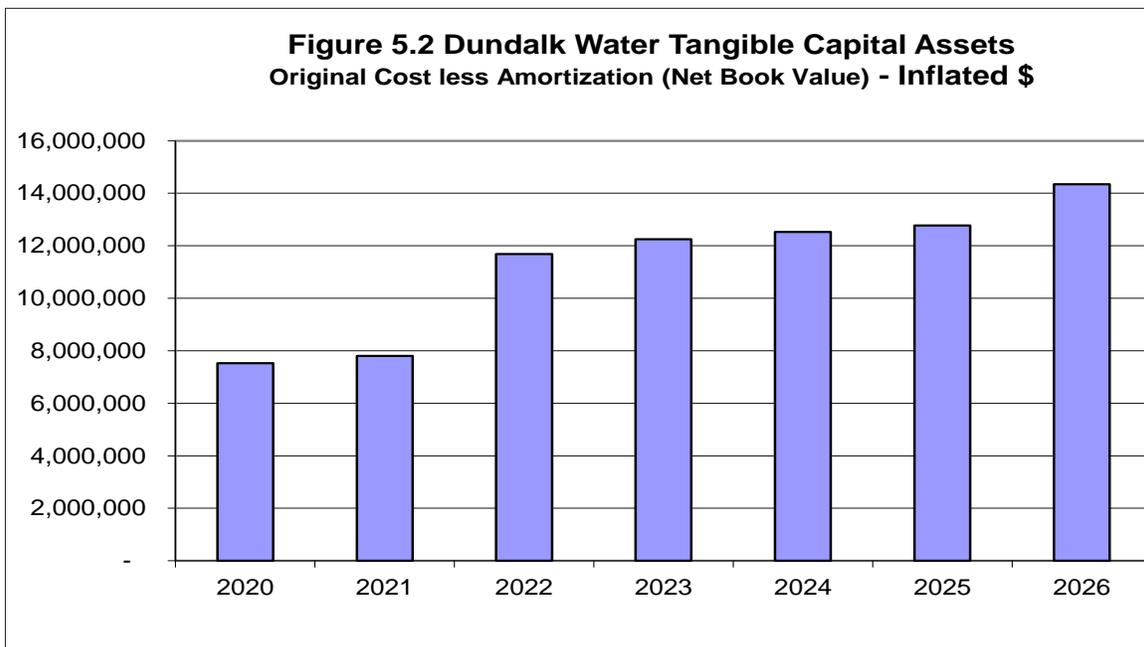


Figure 5.1 shows that that the system is projected to have a surplus in 2020 and 2021 and then an additional loan is taken out to finance a new water tower in 2022. Reserves are drawn down in 2026 to finance a part of the 2026 main street west water main expansion, the costs of which was deemed to be charged to existing users in the 2017 DC study. Looking forward, the reserve recovers quickly after 2026 and is generally in a surplus position through 2119. All assets forming the basis for figure 5.1 are priced in inflated dollars.

A second feature is the total value of the water system's tangible capital assets such as wells, water towers, reservoirs and water lines. Consideration of the value of tangible capital assets is part of PSAB compliance. The current value of the capital assets is termed net book value (NBV). It is the original cost of an asset less the accumulated amortization. Tangible capital assets, once installed, are being used, and are immediately decreasing in value. Annual amortization is determined by dividing the original (historic)

cost of an asset by its expected lifetime in years. Amortization is accumulated as the asset wears out so that by the last year of the expected life of the asset, amortization equals the original value of the asset. At that time, the asset has no net book value.

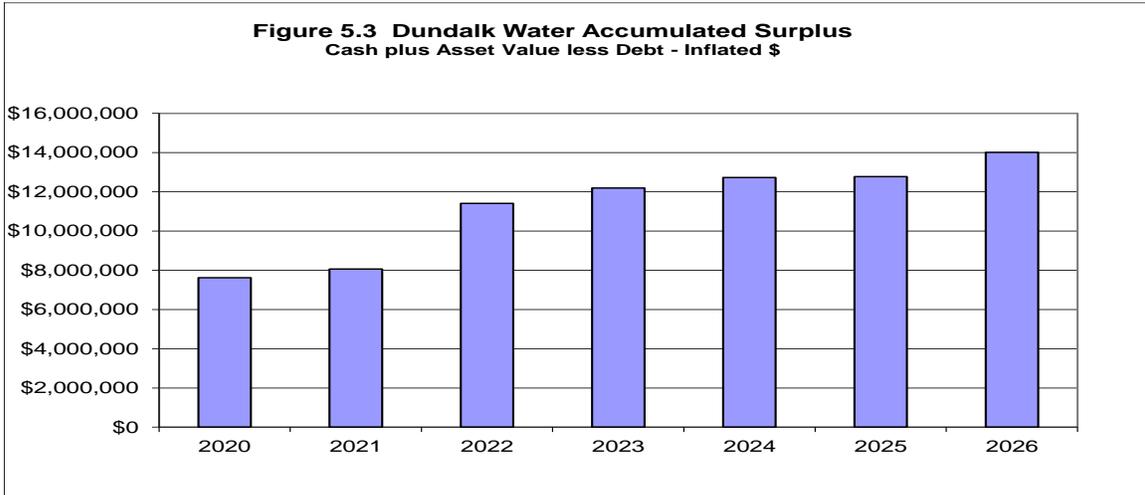
Water systems have a great deal of resources tied up in tangible capital assets and managing these assets is critical to maintaining current and future levels of service. As has been noted above, tangible capital assets, once installed, are being used and decrease in value due to amortization. An increase in tangible capital assets is an indication that assets have been renewed faster than they are used. A decrease indicates that assets are being used, or amortized, faster than they are renewed. The value of the Dundalk water system assets is set out in Figure 5.2.



The net book value increases by nearly double from 2020 to 2026. Assets are being renewed and new assets added to the system. A new water tower is proposed for 2022 and the main street west line oversizing is proposed for 2026, with smaller projects projected to be undertaken in other years during the 2020 to 2026 period. The detailed construction plans are provided in appendix A to the Draft Rate Report dated June 26, 2020.

Financial Plan

A third feature is the accumulated surplus set out in Figure 5.3. It represents cash on hand plus the net book value of tangible capital assets less debt.



From 2020 until 2026, the accumulated surplus is on the upswing adding over 20% in asset value. This indicates that the Township’s proposed financial plan is sustainable for this period and in a growth mode.

## 5.2 Statement of Operations (Table 6.2)

This statement summarizes the operating revenues and expenditures. The expenditures include ongoing operating costs plus asset amortization. It provides an indication of whether or not the system assets are being maintained on a year over year basis.

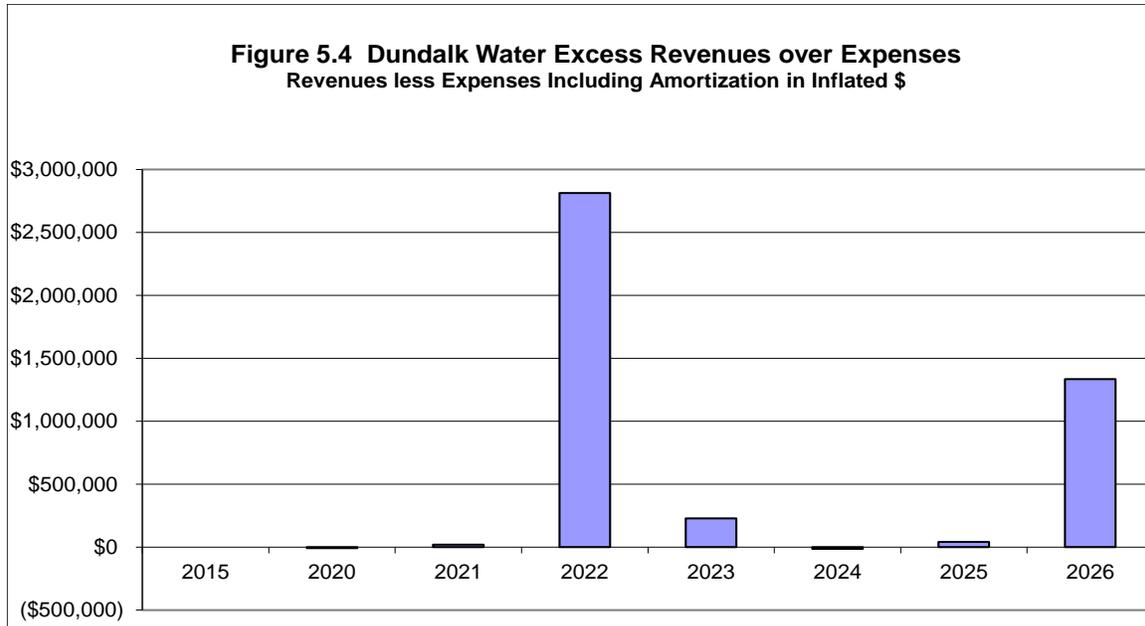


Figure 5.4 indicates that more is being spent on renewal than the decline in the value of the tangible capital assets. The increase in 2022 and 2026 are due to the funds being withdrawn from the development charges reserve, and added to revenue, to help finance the growth attributed cost of capital projects. The Financial Plan has been designed to account for all foreseeable expenditures to 2026 and, in fact, well beyond. The financial asset capital and major maintenance reserves are projected to be maintained at a sustainable level until at indefinitely. In the meantime, there is a modes reserve to handle unexpected emergencies such as assets failing before the projected end of their projected life, or capital expenditures to deal with future new regulations. Consequently, the system is in good shape.

## 5.3 Statement of Cash Flow (Table 6.3)

This fifth feature shows how revenues are generated and spent over the study period. The revenues include user fees. The expenditures include operating expenses and capital acquisitions. These are shown in Table 6.3 and set out in Figure 5.5.

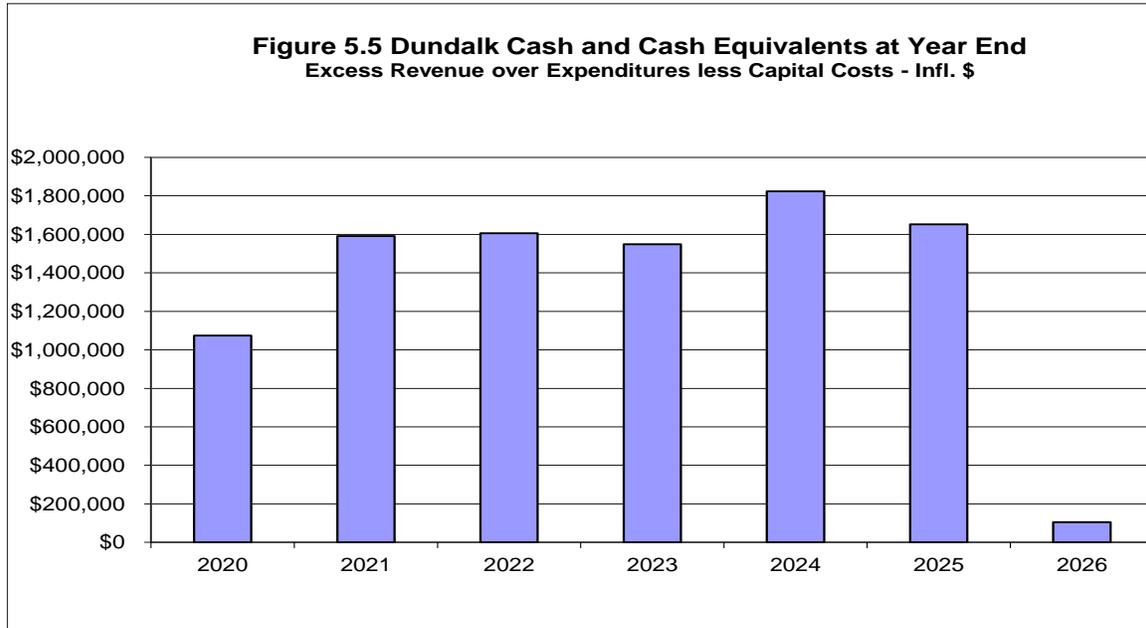


Figure 5.5 indicates that the cash equivalents, in inflated dollars, in the water reserve and development charge reserve are positive throughout the study period and increasing substantially. The overall cash balance puts the Township in a position to fund projected growth and needed capital renewal or major maintenance projects into the future, if user fee revenues are increased at the projected levels of 7%, including inflation, each year to 2026. The projected rates under this recommended approach, in inflated dollars are set out in table 3 below:

**Table 5.4 Proposed Water Rates 2021 to 2026 – Inflated \$**

		2020	2021	2022	2023	2024	2025	2026
5								
6	0.62	26.87	22.72	22.37	22.11	21.97	21.86	21.58
7	0.75	26.87	22.72	22.37	22.11	21.97	21.86	21.58
8	1	67.17	31.81	31.31	30.95	30.76	30.60	30.21
9	1.5	134.34	40.90	40.26	39.79	39.55	39.35	38.84
10	2	214.95	65.89	64.86	64.11	63.73	63.40	62.58
11	2.5	-	159.04	156.57	154.74	153.82	153.02	151.04
12	3	429.90	249.92	246.03	243.16	241.72	240.47	237.36
13	4	671.72	318.08	313.13	309.48	307.65	306.05	302.09
15	<b>Variable Rate</b>							
16	Variable Revent	283,452	353,843	383,404	415,370	449,149	486,461	530,654
17	Water Sold in M	182,127	192,957	203,803	214,667	225,546	236,443	247,355
18	Cost per M3 \$	1.78	1.83	1.88	1.93	1.99	2.06	2.15

#### 5.4 Conclusion

The Dundalk water system has been growing due to an increase in population. This is projected to continue. A water tower construction is projected for 2022 and the main street west oversizing is planned for 2026 with several other smaller projects planned. The system has a modest financial capital reserve and is undertaking a good level of maintenance and capital renewal. This current regime is projected to be sustainable well into the future based on the plans assumptions about system assets, inflation and interest rates as well as annual user fee increases of 7.0% per year from 2021 to 2026, 4% from 2027 to 2070 and then 2.5% 2071-2119. The detailed financial statements, set out in tabular form, that were the basis for the above summary charts follow in Section 6.

## 6.0 Financial Statements

The detailed financial statements are set out in the following tables followed by the notes that correspond to the numbers in the tables.

### 6.1 Statement of Financial Position

<b>Table 6.1 Statement of Financial Position - Dundalk Water System</b>								
	2020	2021	2022	2023	2024	2025	2026	Notes
<b>Financial Assets</b>								
Cash and Cash Equivalents	1,074,136	1,591,048	1,605,198	1,546,932	1,821,316	1,649,679	102,134	1
Long Term Accounts Receivable	-	-	-	-	-	-	-	-
Deposits	-	-	-	-	-	-	-	-
<b>Total Financial Assets</b>	<b>1,074,136</b>	<b>1,591,048</b>	<b>1,605,198</b>	<b>1,546,932</b>	<b>1,821,316</b>	<b>1,649,679</b>	<b>102,134</b>	
<b>Liabilities</b>								
Accounts Payable (Capital)	-	-	-	-	-	-	-	-
Debt Principal Outstanding	286,276	257,358	768,806	684,216	597,538	508,718	417,705	2
Deferred Revenue (Dev Charge Reserve Bal.)	693,312	1,069,340	1,118,074	928,250	1,032,732	1,155,031	41,774	3
DC Loan Principal	-	-	-	-	-	-	-	-
Government Grant	-	-	-	-	-	-	-	4
Other liabilities	-	-	-	-	-	-	-	-
<b>Total Liabilities</b>	<b>979,587</b>	<b>1,326,698</b>	<b>1,886,880</b>	<b>1,612,466</b>	<b>1,630,269</b>	<b>1,663,749</b>	<b>459,479</b>	
<b>Net Financial Assets (Debt)</b>	<b>94,548</b>	<b>264,350</b>	<b>(281,682)</b>	<b>(65,534)</b>	<b>191,047</b>	<b>(14,070)</b>	<b>(357,345)</b>	
<b>Non Financial Assets</b>								
Tangible Capital Asset Cost	8,766,588	9,405,835	9,846,539	14,016,119	14,831,974	15,177,824	15,469,872	5
Additions to Tangible Capital Assets - Cost	639,846	462,278	4,178,989	866,764	581,301	539,733	1,981,327	6
Accumulated Amortization incl. Addition	1,880,248	2,068,481	2,338,835	2,632,740	2,886,945	2,946,216	3,103,228	7
<b>Total Non Financial Assets</b>	<b>7,526,187</b>	<b>7,799,632</b>	<b>11,686,693</b>	<b>12,250,142</b>	<b>12,526,330</b>	<b>12,771,341</b>	<b>14,347,971</b>	
<b>Accumulated Surplus/(deficit)</b>	<b>\$7,620,735</b>	<b>\$8,063,981</b>	<b>\$11,405,011</b>	<b>\$12,184,608</b>	<b>\$12,717,376</b>	<b>\$12,757,271</b>	<b>\$13,990,626</b>	
<b>Note: Unaudited for Planning Purposes Only - Actual results will differ from the above and these differences could be material.</b>								

6.2 Statement of Financial Operations

<b>Table 6.2 Statement of Financial Operations - Dundalk Water System</b>								
	2020	2021	2022	2023	2024	2025	2026	Notes
<b>Revenues</b>								
User Fees	\$598,000	\$639,860	\$684,650	\$732,576	\$783,856	\$838,726	\$897,437	8
Meter Charges for New Owners	\$15,450	\$26,523	\$27,318	\$28,138	\$28,982	\$29,851	\$30,747	9
Other Revenues	\$21,305	\$21,780	\$22,267	\$22,765	\$23,275	\$23,797	\$24,331	10
Interest on Reserves	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Earned Dev Charge Revenues	\$36,050	\$0	\$2,868,955	\$281,377	\$0	\$0	\$1,254,127	11
<b>Total Revenues</b>	<b>\$670,805</b>	<b>\$688,163</b>	<b>\$3,603,190</b>	<b>\$1,064,856</b>	<b>\$836,113</b>	<b>\$892,374</b>	<b>\$2,206,641</b>	
<b>Expenses</b>								
Day to Day Operating Expenses	\$486,446	\$470,912	\$482,772	\$518,310	\$530,678	\$543,355	\$556,349	12
Debt Interest	\$7,226	\$6,559	\$20,020	\$17,969	\$15,877	\$13,734	\$11,536	13
Amortization	\$183,706	\$188,833	\$290,320	\$303,314	\$305,114	\$294,721	\$305,623	14
Lead Abatement	\$625	\$638	\$650	\$663	\$677	\$690	\$704	15
Source Water Protection	\$0	\$1,000	\$0	\$0	\$1,000	\$0	\$0	16
<b>Total Expenses</b>	<b>\$678,004</b>	<b>\$667,942</b>	<b>\$793,762</b>	<b>\$840,256</b>	<b>\$853,345</b>	<b>\$852,501</b>	<b>\$874,213</b>	
Excess (Deficit) of Revenues over Expenses	(\$7,199)	\$20,221	\$2,809,429	\$224,600	(\$17,232)	\$39,874	\$1,332,429	
<b>Other</b>								
Working Capital								
Developer Asset Contribution	\$478,136	\$423,025	\$499,868	\$555,000	\$550,000			17
Miscellaneous								
	\$470,938	\$443,246	\$3,309,297	\$779,600	\$532,768	\$39,874	\$1,332,429	
Accumulated Surplus (Deficit) Beginning of year	\$7,149,797	\$7,620,734	\$8,063,981	\$11,405,011	\$12,184,611	\$12,717,378	\$12,757,252	
Accumulated Surplus (Deficit) End of Year	\$7,620,734	\$8,063,981	\$11,405,011	\$12,184,611	\$12,717,378	\$12,757,252	\$13,990,607	
<b>Note: Unaudited for Planning Purposes Only - Actual results will differ from the above and these differences could be material.</b>								

6.3 Statement of Cash Flow

<b>Table 6.3 Statements of Change in Cash Flow - Dundalk Water System</b>								
	2020	2021	2022	2023	2024	2025	2026	Notes
<b>Operating Transactions</b>								
User Fee Revenues - Residential and Commercial	\$598,000	\$639,860	\$684,650	\$732,576	\$783,856	\$838,726	\$897,437	
Other Revenues	\$21,305	\$21,780	\$22,267	\$22,765	\$23,275	\$23,797	\$24,331	
Meter Charges to New Users	\$15,450	\$26,523	\$27,318	\$28,138	\$28,982	\$29,851	\$30,747	
Earned Development Charge	\$36,050	\$0	\$2,868,955	\$281,377	\$0	\$0	\$1,254,127	
Other Revenues								
Total Cash for Operating Expenses	\$486,446	\$472,550	\$482,772	\$518,973	\$532,354	\$544,045	\$557,053	
Amortization	\$183,706	\$188,833	\$290,320	\$303,314	\$305,114	\$294,721	\$305,623	
Debt Interest	\$7,226	\$6,559	\$20,020	\$17,969	\$15,877	\$13,734	\$11,536	
Development Charge Proceeds (Net)	\$320,730	\$376,029	\$48,733	(\$189,824)	\$104,482	\$122,299	(\$1,113,256)	18
Excess of Revenues Over Expenses	\$314,156	\$396,249	\$2,858,812	\$34,776	\$87,250	\$162,172	\$219,172	
<b>Deduct Non Cash Charges to Operations</b>								
Amortization	\$183,706	\$188,833	\$290,320	\$303,314	\$305,114	\$294,721	\$305,623	
Loss on the Disposal of Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total	\$183,706	\$188,833	\$290,320	\$303,314	\$305,114	\$294,721	\$305,623	
<b>Working Capital Items</b>								
Accounts Receivable	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Working Capital Items	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Capital Work in Progress	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Cash provided/used in Operating Transactions	\$497,862	\$585,083	\$3,149,132	\$338,090	\$392,364	\$456,894	\$524,795	
<b>Capital Transactions</b>								
Acquisition of TCAs	\$639,846	\$462,278	\$4,178,989	\$866,764	\$581,301	\$539,733	\$1,981,327	
Gift of Assets from Developers included in the above	\$478,136	\$423,025	\$499,868	\$555,000	\$550,000	\$0	\$0	
Proceeds on Disposal of TCA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Cash provided/used in Capital Transactions	\$161,710	\$39,253	\$3,679,121	\$311,764	\$31,301	\$539,733	\$1,981,327	
<b>Investing Transactions</b>								
Proceeds from Investments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Cash (used in) Provided by Investing Activities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Cash Provided/used in Investing Transactions	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
<b>Financing Transactions</b>								
Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Proceeds from Debentures/Loans		\$0	\$594,000	\$0	\$0	\$0	\$0	
Debt Principal Repayment	\$28,250	\$28,918	\$82,551	\$84,590	\$86,678	\$88,820	\$91,013	
Proceeds from Government Grants		\$0	\$0	\$0	\$0	\$0	\$0	
Working Surplus	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Cash Provided by/(used) in Financing Activities	(\$28,250)	(\$28,918)	\$511,449	(\$84,590)	(\$86,678)	(\$88,820)	(\$91,013)	
Increase (decrease) in Cash Equivalents	\$307,902	\$516,912	\$14,151	(\$58,264)	\$274,384	(\$171,659)	(\$1,547,544)	
Cash and Cash Equivalents at the beginning of the Year	\$766,234	\$1,074,136	\$1,591,048	\$1,605,198	\$1,546,934	\$1,821,319	\$1,649,660	
Cash and Cash Equivalents at the End of the Year	\$1,074,136	\$1,591,048	\$1,605,198	\$1,546,934	\$1,821,319	\$1,649,660	\$102,115	
<b>Note: Unaudited for Planning Purposes Only - Actual results will differ from the above and these differences could be material.</b>								

#### 6.4 Notes on the Dundalk Water System Financial Plan

1. Cash and cash equivalent is represented by the funds in short term bank investments drawn from the capital reserve and the development charges reserve. The interest on the funds in the development charge reserve are shown within the reserve and are set out in appendix 2. The interest is set at 1.5% per annum based on the previous year closing balance.
2. A loan was taken out in December 2019 for \$314,526 for ten years at 2.5% per annum. A second loan of \$594,000 is proposed for January 1, 2022 for 10 years at 2.5%. This line represents the principal payments on these loans. These loans cover the existing user portion of the larger loan taken out to finance projects.
3. Deferred revenue represents funding that is held in cash pending events that gave rise to the payment of these funds. The Township is often receiving development charge funds in advance of building facilities to accommodate growth or to pay debt charges on past growth oriented projects. The funds will be considered as expenditures in the year when a liability that facilitates growth is incurred, such as the years when the Township is searching for a new well site to accommodate growth. The projected reserve income, expenses, and transactions for 2020 to 2026 is set out in appendix 2.
4. No government grants have been assumed for the 2020-26 period covered by this study. Should grants be received, they would be applied to reduce the cost of the projects set out in appendix A to the July 2, 2020 rate report.
5. Tangible capital asset cost is the cost of the asset when it was installed.
6. Additions are the assets added to the capital inventory in a particular year at the actual cost of the asset.
7. The Township valued tangible capital assets acquired up to the end of 2018. This project has extended the valuation of new capital assets and capital asset replacement to 2026. Capital works are assumed to have no residual value when they have reached the end of their projected life. Current capital works costs, based on historic cost, are inflated to future cost at an inflation rate of 3% per annum for the 2020 to 2026 period. Amortization was determined using the straight-line method. All works are assumed to have been constructed or disposed of on January 1.
8. This user fee revenue from the fixed and variable portion of the water charges paid by the residential and commercial ratepayers that number approximately 886 users.
9. This revenue comes from charges for new water meters required by the residents of new residential and commercial units added to the system
10. This includes a variety of charges including connection fees, final reading charges, and sale of water permits, late payment penalties and miscellaneous revenues.
11. Earned development charge revenues are funds taken from the DC reserve to pay for some or all current projects that support growth.
12. Day to day operating costs cover wages, office supplies, chemicals, energy and other features needed to run a water system. Most are projected to increase at 2.0-3.0 % per annum.
13. Debt interest is on the debt set out in note 2 above.
14. This is the annual amortization of each water system asset determined by dividing original (historic) acquisition value of the asset by the number of years it is expected to be in service. The amortization of each asset is summed to yield an annual figure that is shown here as a non-financial expense.
15. There is no lead present in the system. Approximately \$600 is spent on routine lead testing and system surveillance each year.

16. The Township of Southgate has implemented its source water protection program. The Public Works Manager is the designed Risk Management Official and the annual activities undertaken are covered in the manager's wages. Publicity and educational materials as well as signage are kept up to date and in stock. \$2,000 has been budget to replenish stocks over the next six years.
17. These are assets built and paid for by developers and turned over to the municipality for long-term operation. These were the actual costs paid for the assets transferred.
18. This the end of year reserve total less the beginning of the year totals. The transactions for the development charge reserve are set out in appendix 2.

## Appendix 1 Ontario Regulation 453/07

### ONTARIO REGULATION 453/07 FINANCIAL PLANS

**Consolidation Period:** From April 1, 2008 to the [e-Laws currency date](#).

Last amendment: O. Reg. 69/08.

*This is the English version of a bilingual regulation.*

#### Requirement to prepare financial plans

**1. (1)** A person who makes an application under clause 32 (1) (b) of the Act for a municipal drinking water licence shall, before making the application, prepare and approve financial plans for the system that satisfy the requirements prescribed under section 2. O. Reg. 453/07, s. 1 (1).

**(2)** A person who makes an application under subsection 32 (4) of the Act for the renewal of a municipal drinking water licence shall, before making the application, prepare and approve financial plans for the system that satisfy the requirements prescribed under section 3. O. Reg. 453/07, s. 1 (2).

**(3)** As a condition in a municipal drinking water licence that is issued in response to an application made under section 33 of the Act for a municipal drinking water licence, the Director shall include a requirement that the owner of the drinking water system, by the later of July 1, 2010 and the date that is six months after the date the first licence for the system is issued, prepare and approve financial plans for the system that satisfy the requirements prescribed under section 3. O. Reg. 453/07, s. 1 (3).

**(4)** The Director shall include, as a condition in a municipal drinking water licence, the requirement set out in subsection (3) in any amendments to a license made after the application, if the condition is not satisfied at the time when the amendment is made. O. Reg. 453/07, s. 1 (4).

#### Financial plan requirements; new systems

**2.** For the purposes of clause (b) of the definition of “financial plans” in subsection 30 (1) of the Act, the following requirements are prescribed for financial plans that are required by subsection 1 (1) to satisfy the requirements of this section:

1. The financial plans must be approved by a resolution that indicates that the drinking water system is financially viable and that is passed by,
  - i. the council of the municipality, if the owner of the drinking water system is a municipality, or
  - ii. the governing body of the owner, if the owner of the drinking water system has a governing body and is not a municipality.
2. The financial plans,
  - i. must include a statement that the financial impacts of the drinking water system have been considered, and
  - ii. must apply for a period of at least six years.
3. The first year to which the financial plan must apply is the year in which the drinking water system is expected to first serve the public.
4. For each year in which the financial plans apply, the financial plans must include details of the proposed or projected financial operations of the drinking water system itemized by,
  - i. total revenues, further itemized by water rates, user charges and other revenues,
  - ii. total expenses, further itemized by amortization expenses, interest expenses and other expenses,
  - iii. annual surplus or deficit, and
  - iv. accumulated surplus or deficit.
5. The owner of the drinking water system must,
  - i. make the financial plans available, on request, to members of the public who are served by the drinking water system without charge,

- ii. make the financial plans available to members of the public without charge through publication on the Internet, if the owner maintains a website on the Internet, and
  - iii. provide notice advising the public of the availability of the financial plans under subparagraphs i and ii, if applicable, in a manner that, in the opinion of the owner, will bring the notice to the attention of members of the public who are served by the drinking water system.
6. The owner of the drinking water system must give a copy of the financial plans to the Ministry of Municipal Affairs and Housing. O. Reg. 453/07, s. 2.

**Financial plan requirements; licence renewal**

**3. (1)** For the purposes of clause (b) of the definition of “financial plans” in subsection 30 (1) of the Act, the following requirements are prescribed for financial plans that are required by subsection 1 (2) or a condition that is included in a municipal drinking water licence under subsection 1 (3) to satisfy the requirements of this section:

1. The financial plans must be approved by a resolution that is passed by,
  - i. the council of the municipality, if the owner of the drinking water system is a municipality, or
  - ii. the governing body of the owner, if the owner of the drinking water system has a governing body and is not a municipality.
2. The financial plans must apply to a period of at least six years.
3. The first year to which the financial plans must apply must be the year determined in accordance with the following rules:
  - i. If the financial plans are required by subsection 1 (2), the first year to which the financial plans must apply must be the year in which the drinking water system’s existing municipal drinking water licence would otherwise expire.
  - ii. If the financial plans are required by a condition that was included in a municipal drinking water licence under subsection 1 (3), the first year to which the financial plans must apply must be the later of 2010 and the year in which the first licence for the system was issued.
4. Subject to subsection (2), for each year to which the financial plans apply, the financial plans must include the following:
  - i. Details of the proposed or projected financial position of the drinking water system itemized by,
    - A. total financial assets,
    - B. total liabilities,
    - C. net debt,
    - D. non-financial assets that are tangible capital assets, tangible capital assets under construction, inventories of supplies and prepaid expenses, and
    - E. changes in tangible capital assets that are additions, donations, write downs and disposals.
  - ii. Details of the proposed or projected financial operations of the drinking water system itemized by,
    - A. total revenues, further itemized by water rates, user charges and other revenues,
    - B. total expenses, further itemized by amortization expenses, interest expenses and other expenses,
    - C. annual surplus or deficit, and
    - D. accumulated surplus or deficit.
  - iii. Details of the drinking water system’s proposed or projected gross cash receipts and gross cash payments itemized by,
    - A. operating transactions that are cash received from revenues, cash paid for operating expenses and finance charges,
    - B. capital transactions that are proceeds on the sale of tangible capital assets and cash used to acquire capital assets,
    - C. investing transactions that are acquisitions and disposal of investments,
    - D. financing transactions that are proceeds from the issuance of debt and debt repayment,

- E. changes in cash and cash equivalents during the year, and
  - F. cash and cash equivalents at the beginning and end of the year.
  - iv. Details of the extent to which the information described in subparagraphs i, ii and iii relates directly to the replacement of lead service pipes as defined in section 15.1- 3 of Schedule 15.1 to Ontario Regulation 170/03 (Drinking Water Systems), made under the Act.
  - 5. The owner of the drinking water system must,
    - i. make the financial plans available, on request, to members of the public who are served by the drinking water system without charge,
    - ii. make the financial plans available to members of the public without charge through publication on the Internet, if the owner maintains a website on the Internet, and
    - iii. provide notice advising the public of the availability of the financial plans under subparagraphs i and ii, if applicable, in a manner that, in the opinion of the owner, will bring the notice to the attention of members of the public who are served by the drinking water system.
  - 6. The owner of the drinking water system must give a copy of the financial plans to the Ministry of Municipal Affairs and Housing. O. Reg. 453/07, s. 3 (1).
- (2) Each of the following sub-subparagraphs applies only if the information referred to in the sub-subparagraph is known to the owner at the time the financial plans are prepared:
- 1. Sub-subparagraphs 4 i A, B and C of subsection (1).
  - 2. Sub-subparagraphs 4 iii A, C, E and F of subsection (1). O. Reg. 453/07, s. 3 (2).

**Alternative requirements for two or more drinking water systems**

4. If section 3 applies to the financial plans of two or more drinking water systems that are solely owned by the same owner, the requirements prescribed by the section may, as an alternative, be satisfied by financial plans that comply with the section but treat those systems as if they were one drinking water system. O. Reg. 453/07, s. 4.

**Amendment of financial plans**

5. Sections 2 and 3 do not prevent financial plans from being amended. O. Reg. 453/07, s. 5.

**Additional information**

6. The requirements of this Regulation do not prevent a person from providing additional information in financial plans prepared for the purpose of meeting the requirements of the Act. O. Reg. 453/07, s.

Appendix 2 Development Charge Reserve Fund 2020-26 Inflated \$ (Preliminary)

	2020	2021	2022	2023	2024	2025	2026
<b>Revenues</b>							
Residential Connections	82	82	82	82	82	82	82
Fee per Unit	\$ 5,868.94	\$ 6,045.01	\$ 6,226.36	\$ 6,413.15	\$ 6,605.54	\$ 6,803.71	\$ 7,007.82
Total	\$ 481,253	\$ 495,691	\$ 510,561	\$ 525,878	\$ 541,655	\$ 557,904	\$ 574,641
Additional GFA (Average) Ft2	18,000	18,000	18,000	18,000	18,000	18,000	18,000
Fee/Ft2	\$ 3.49	\$ 3.59	\$ 3.70	\$ 3.81	\$ 3.93	\$ 4.04	\$ 4.17
Total Revenue from DCs	\$ 5,698	\$ 5,698	\$ 5,698	\$ 5,698	\$ 5,698	\$ 5,698	\$ 5,698
<b>Expenses</b>							
Debt Principal and Interest							
Main Street East Water DC Portion	91,530	91,530	91,530	91,530	91,530	91,530	91,530
Well D5 Water DC Portion	215,471	215,471	215,471	215,471	215,471	215,471	215,471
Water Tower DC Portion			293,792	293,792	293,792	293,792	293,792
Main Street W Oversizing DC Portion							141,658
Total Debt Expenditures	307,001	307,001	600,793	600,793	600,793	600,793	742,451
<b>DC Reserve Fund</b>							
Opening Value	\$ 372,582	\$ 522,070	\$ 724,289	\$ 382,665	\$ 37,811	\$ (15,062)	\$ (52,479)
Dev Charge Revenue	\$ 486,951	\$ 501,389	\$ 516,259	\$ 531,576	\$ 547,353	\$ 563,602	\$ 580,339
Gross Expenditures (to) from Capital	\$ (36,050)	\$ -	\$ (2,868,955)	\$ (281,377)	\$ -	\$ -	\$ (1,254,127)
DC Loan Portion			\$ 2,601,000				\$ 1,254,127
Net Expenditures (to) from Capital	\$ (36,050)	\$ -	\$ (267,955)	\$ (281,377)	\$ -	\$ -	\$ (2,508,254)
Debt P and Interest	\$ (307,001)	\$ (307,001)	\$ (600,793)	\$ (600,793)	\$ (600,793)	\$ (600,793)	\$ (742,451)
Interest on Prev Year End	\$ 5,589	\$ 7,831	\$ 10,864	\$ 5,740	\$ 567	\$ (226)	\$ (787)
Total	\$ 522,070	\$ 724,289	\$ 382,665	\$ 37,811	\$ (15,062)	\$ (52,479)	\$ (215,378)

Appendix 3 Projected Development Charge Debt 2020-2026 - Inflated \$

**Main St E Oversizing**

Beginning Principal	811,438	738,557	663,952	587,584	509,411	429,390	347,477
Principal Payment	72,882	74,605	76,368	78,173	80,021	81,913	83,849
Ending Principal	738,557	663,952	587,584	509,411	429,390	347,477	263,628

**Well D5**

Beginning Principal	1,910,317	1,738,736	1,563,099	1,383,311	1,199,272	1,010,884	818,042
Principal Payment	171,581	175,637	179,789	184,038	188,389	192,842	197,400
End Principal	1,738,736	1,563,099	1,383,311	1,199,272	1,010,884	818,042	620,641

**Water Tower**

Beginning Principal	0	0	2,601,000	2,369,145	2,131,427	1,887,697	1,637,804
Principal Payment	0	0	231,855	237,718	243,730	249,893	256,213
Ending Principal	0	0	2,369,145	2,131,427	1,887,697	1,637,804	1,381,591

**Main Street W Oversizing**

Beginning Principal	0	0	0	0	0	0	1,254,127
Principal Payment	0	0	0	0	0	0	111,794
Ending Principal	0	0	0	0	0	0	1,142,333

Total DC Beginning Princip	2,721,755	2,477,293	4,828,051	4,340,040	3,840,110	3,327,971	4,057,450
Total Principal Payment	244,463	250,241	488,011	499,930	512,139	524,648	649,256
Total DC Debt at Year End	2,477,293	2,227,051	4,340,040	3,840,110	3,327,971	2,803,323	3,408,194