



City of  
**Peterborough**

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**TO:** Members of the Budget Committee

**FROM:** W. H. Jackson, Director of Utility Services

**MEETING DATE:** January 13, 2011

**SUBJECT:** Report USEC11-002  
Servicing of Annexed Properties

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## **PURPOSE**

To provide information on the extent of unserviced occupied properties within the City of Peterborough and to provide an estimated cost to service these properties.

## **RECOMMENDATIONS**

That Council approve the recommendations outlined in Report USEC11-002 dated January 13, 2011, of the Director of Utility Services, as follows:

- a) That report USEC11-002 be received for information.
- b) That staff be requested to report further on the matter of funding the servicing of annexed properties within the City generally following the framework set out in Report USSEC11-002; and
- c) That staff include in the report cited in Recommendation b) the matter of funding storm water, and watercourse infrastructure costs including the operation, maintenance, and implementation of these works

## **BUDGET AND FINANCIAL IMPLICATIONS**

There are no budget or financial implications to receiving this report.

## BACKGROUND

Council, at its meeting of December 13, 2010 in considering a motion under “Other Business” from the December 6, 2010 Committee of the Whole adopted the following:

*“That the Director of Utility Services be requested to provide a report on scheduling to provide services to rural subdivisions that have been obtained through annexation.”*

### 1. Overall View of Service Deficiencies

Typically, urban area servicing includes the following infrastructure elements:

- Water Service
- Sanitary Sewer Service
- Storm Sewer Service
- Street Lights
- Sidewalks
- Curbs and gutters
- Roadways

To provide an overview of the magnitude of servicing requirements within the City of Peterborough, staff used existing available data to identify streets, or street segments, that are “deficient” in any of the six services identified above. Based on this analysis the following are the overall estimated costs to bring every street within the City to current urban standards.

1. Water Service	\$ 17,000,000
2. Sanitary Sewer Service	\$ 17,000,000
3. Storm Sewer Service	\$ 45,000,000
4. Street Lights	\$ 8,000,000
5. Sidewalks	\$ 97,000,000
6. Curbs and Gutters	\$ 15,000,000
7. Roadways	<u>\$105,000,000</u>
<b>TOTAL</b>	<b>\$304,000,000</b>

The costs cited here are very general and do not account, for example, for pumping stations, in-line booster stations, water pressure zone adjustments etc. Given staff's desire to have this report before Council during the 2011 budget discussion, there has been insufficient time to involve the Water Utility (PUC) in the analysis and production of these costs estimates. Of course, more detailed cost estimates would have to be done on a project specific basis.

## 2. Specific Area Service Deficiencies

In reviewing servicing needs, staff is of the opinion that the provision of water and sanitary services are the top priorities. Staff also feels the provision of these services to existing residents should take precedence over those areas that have still to develop and industrial/commercial areas. Council, of course, may wish to provide staff with more specific guidelines in this regard.

If the total requirements are filtered based on this criteria, a list (see Appendix A) of 31 streets encompassing 74 road sections is generated with a funding requirement of approximately \$55,000,000. The specific road sections are shown pictorially in Appendix B.

For this cost estimate, it was assumed in situations where two of water, sanitary sewer or storm sewer were required, reconstruction of the entire road, including curbs and sidewalks and streetlights would be undertaken at the same time.

For those instances where only one of water, sanitary sewer or storm sewer was required, it was assumed that only ½ of the roadway would be reconstructed but that no curbs would be installed unless it was needed in conjunction with a new storm sewer. In this circumstance, it was also assumed that no sidewalks or streetlights would be installed.

## 3. Analysis

A closer look at the estimated cost to service the areas described in Appendices A & B reveals the following cost breakdowns:

• Water Service	\$ 6,200,000
• Sanitary Sewer	\$ 6,800,000
• Storm Sewer	\$ 9,000,000
• Street Lights	\$ 1,900,000
• Sidewalks	\$ 9,200,000
• Curb & Gutters	\$ 2,700,000
• Roadways	<u>\$19,500,000</u>
<b>TOTAL</b>	<b>\$55,300,000</b>

If Council wished to use the Sanitary Surcharge Reserve as a funding source to help service the subject areas, these costs can be amalgamated into sanitary surcharge costs (\$14,000,000) and tax levy costs (\$43,200,000). The sanitary surcharge costs include a proportional amount of the necessary road costs to repair the road after installation of the sanitary sewer.

If the costs to install the storm sewer are separated, the three funding areas would be:

- Sanitary surcharge costs \$13,700,000

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- Storm sewer costs \$18,700,000
  - Tax levy costs \$22,900,000

In this scenario, the storm sewer costs include a portion of the necessary road repair costs as a result of the installation of the storm sewer as well as the full cost of the curb and gutter. The Tax Levy costs include costs for the water service, sidewalks, streetlights and road works that are mutually exclusive from any sanitary/storm sewer or water service works. Although it is highly desirable (and ultimately less costly), it is not necessary to include sidewalk and street lights works when the road is reconstructed following the installation of sanitary/storm sewers or water service.

#### 4. Funding Options

The Sanitary Sewer Surcharge presently has a balance that is greater than the \$13,700,000 required for the sanitary sewer works quoted in Section 3. Council should be aware, however, that implementation of the results of the ongoing Environmental Assessment study of the inflow and infiltration of storm water into our sanitary sewer system could draw a significant amount from this funding source. Recent Provincial Legislation (**Bill 72**) is requiring sustainable sanitary and storm water systems. Council should expect a report in the third quarter of 2011 that will provide more details on the fact that both sewer systems, and more particularly the storm water system, are now operating with funding shortfalls based on sustainability and life-cycle costing criteria.

The Tax Levy component can be secured as a proportion of the available yearly capital levy or a special debenture program can be established to raise these funds.

It has already been stated that due to time constraints, PUC has not been involved in the production of this report and therefore to make commentary on their aspect of the funding scenario would be inappropriate at this time. If desired by Council, staff would investigate and discuss in greater detail with PUC to determine more accurate costs and issues surrounding water servicing of the subject annexed areas and report on such.

The City's current servicing policy should also be reviewed specifically with respect to sharing of costs with properties that may potentially benefit financially from proposed servicing.

#### 5. Timing Considerations

A number of matters need to be cleared up before servicing can be extended to areas identified in Appendix B including:

- Council needs to agree that Appendix B includes the initial servicing improvement work they wish to see;
- Detailed discussions are required with PUC regarding their ability to service the areas identified in this report and the cost and timing to implement that servicing;

- Council needs to fully understand the financing aspect of this initiatives; and
- Staff will need to report on the funding requirements necessary for the ongoing maintenance and operation of our storm water system including any requirements that can be envisioned with new legislation that is on the horizon.

The collaboration with PUC and the reporting/discussion and adoption of a storm water funding scenario could easily take all of 2011 if not longer.

The draft 2011 Capital Budget identifies major capital projects to the year 2014. As can be seen from the budget documents, the capital projects projected from 2015 to 2020 come at a significant cost. At this time, it is staffs' understanding that there are no health and safety pressures to immediately service the various unserved areas. Accordingly, staff feels it is appropriate to develop a 10-year servicing plan and that it would also be appropriate based on existing budget constraints to begin this servicing in 2020. After all of the discussions with PUC and considerations have been given to various funding scenarios, it may be possible to move this start date forward but, for now, this will give residents in the subject areas a horizon to plan for.

In Appendix "C" staff has identified how a program such as this might unfold.

## **SUMMARY**

A potential Capital program has been generated and requests for future reports have been suggested to provide guidance to Council on possible funding options for this Capital program.

Submitted by,

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Director, Utility Services

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Attachments:

Appendix A – Residential Locations that could be Included in a "Servicing" Program  
Appendix B – Infrastructure Improvements Locations  
Appendix C – Potential Capital Program to Service Selected Areas in the City

## Appendix A - Residential Locations that could be Included in a "Servicing" Program

STREET_NAME	LENGTHM	FROM_CROSS_STREET	TO_CROSS_STREET
ARMOUR RD	285.9	NASSAU MILLS RD	DEAD END EAST
ARMOUR RD	545.3	DAFOE DR	ARMOUR RD
ARMOUR RD	568.6	FRANCES STEWART RD	DAFOE DR
ARMOUR RD	333.6	ARMOUR RD	NASSAU MILLS RD
ARMOUR RD	149.5	CUNNINGHAM BV	DAFOE DR
ASHBURNHAM DR	517.4	MANIECE AV	HUNTER ST E
ASHBURNHAM DR	580.1	HUNTER ST E	OLD NORWOOD RD
ASHBURNHAM DR	45.5	HUNTER ST E	HUNTER ST E
ASHBURNHAM DR	18	TRENTVIEW RD	MCFARLANE ST
ASHBURNHAM DR	103.5	OLD NORWOOD RD	TRENTVIEW RD
ASHBURNHAM DR	270	MARIA ST	MANIECE AV
BREALEY DR	704	IRELAND DR	PARKHILL RD W
BREALEY DR	160.3	MAPLERIDGE DR	KAWARTHA HEIGHTS BV
BREALEY DR	333.8	CHERRYHILL RD	MAPLERIDGE DR
BREALEY DR	401.6	SHERBROOKE ST	GLENFOREST BV
BREALEY DR	378.2	GLENFOREST BV	IRELAND DR
BREALEY DR	409.3	KAWARTHA HEIGHTS BV	HEWITT DR
BREALEY DR	411.2	SIR SANDFORD FLEMING DISTENSON BV	
CARNEGIE AV	479.1	HERITAGE TL	CITY LIMIT
DAFOE DR	322.8	DEAD END SOUTH	ARMOUR RD
DANIEL ST	104.6	DEAD END EAST	SCOLLARD RD
DANIEL ST	348.2	SCOLLARD RD	DEWAR CR
DANIEL ST	99.1	DEWAR CR	HILLSIDE ST
DEANA BV	89.4	MARTIN RD	O'LEARY AV
DEANA BV	105.9	O'LEARY AV	SIMONS AV
DEWAR CR	65.4	DANIEL ST	DEAD END EAST
FAIRBAIRN ST	191.7	HILLSIDE ST	MCCREA DR
FAIRBAIRN ST	399.4	MCCREA DR	TOWERHILL RD
GREEN BV	520.8	SPILLSBURY DR	KINGDON AV
HILLSIDE ST	137.6	SIMONS AV	DANIEL ST
HILLSIDE ST	31	DANIEL ST	DEAD END WEST
HILLSIDE ST	88.9	COCHRANE CR	WESTDALE AV
HILLSIDE ST	87.6	DEAD END EAST	COCHRANE CR
HILLVIEW DR	323.3	DEAD END SOUTH	TOWERHILL RD
HUNTER ST E	269	MUSEUM DR	HUNTER ST E
HUNTER ST E	42.1	HUNTER ST E	ASHBURNHAM DR
HUNTER ST E	28.7	HUNTER ST E	ASHBURNHAM DR
HUNTER ST E	170.7	ARMOUR RD	MUSEUM DR
HYWOOD RD	176.8	SHERBROOKE ST	LINDEN LEE
MACFARLANE AV	61.3	TELEVISION RD	THORNBURY DR
MACFARLANE AV	357.3	THORNBURY DR	NAISH DR
MACFARLANE AV	161	NAISH DR	TRENTVIEW RD



STREET_NAME	LENGTHM	FROM_CROSS_STREET	TO_CROSS_STREET
MACFARLANE AV	57.9	MACFARLANE AV	NAISH DR
MANIECE AV	1014	ASHBURNHAM DR	TELEVISION RD
MARIA ST	465.1	ASHBURNHAM DR	WALKER AV
MARTIN RD	134.7	DEANA BV	O'LEARY AV
MARTIN RD	122.8	O'LEARY AV	SIMONS AV
MCCREA DR	382	DEAD END EAST	FAIRBAIRN ST
MCFARLANE ST	175.3	WATTS AV	ASHBURNHAM DR
NAISH DR	292.1	OLD NORWOOD RD	MACFARLANE AV
OLD NORWOOD RD	275.1	OLD NORWOOD RD	THORNBURY DR
OLD NORWOOD RD	140.8	THORNBURY DR	TELEVISION RD
OLD NORWOOD RD	205.6	ASHBURNHAM DR	NAISH DR
OLD NORWOOD RD	171.9	NAISH DR	OLD NORWOOD RD
O'LEARY AV	213.4	DEANA BV	MARTIN RD
PARKHILL RD E	398.3	CANAL RD	KINGSDALE DR
PARKHILL RD E	457.5	KINGSDALE DR	TELEVISION RD
PARKHILL RD W	1497.8	RAVENWOOD DR	BREALEY DR
PARKHILL RD W	28.8	BREALEY DR	PARKHILL RD W
SCOLLARD RD	88.8	SIMONS AV	DANIEL ST
SHERBROOKE ST	58.5	BREALEY DR	CITY LIMIT
SHERBROOKE ST	373.9	DENURE DR	BREALEY DR
SIMONS AV	105.2	CHEMONG RD	DEANA BV
SIMONS AV	142.6	DEANA BV	SCOLLARD RD
SIMONS AV	185.2	SCOLLARD RD	HILLSIDE ST
SIMONS AV	65	HILLSIDE ST	MARTIN RD
SIMONS AV	32.4	MARTIN RD	DEAD END SOUTH
TELEVISION RD	918.2	MANIECE AV	OLD NORWOOD RD
TELEVISION RD	207.6	OLD NORWOOD RD	MACFARLANE AV
TELEVISION RD	622.5	MACFARLANE AV	PARKHILL RD E
THORNBURY DR	268.3	OLD NORWOOD RD	MACFARLANE AV
TOWERHILL RD	621.2	HILLVIEW DR	FAIRBAIRN ST
TOWERHILL RD	250.9	OLD TOWERHILL RD	HILLVIEW DR
TRENTVIEW RD	139.6	ASHBURNHAM DR	MACFARLANE AV

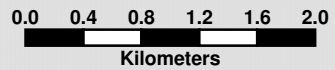
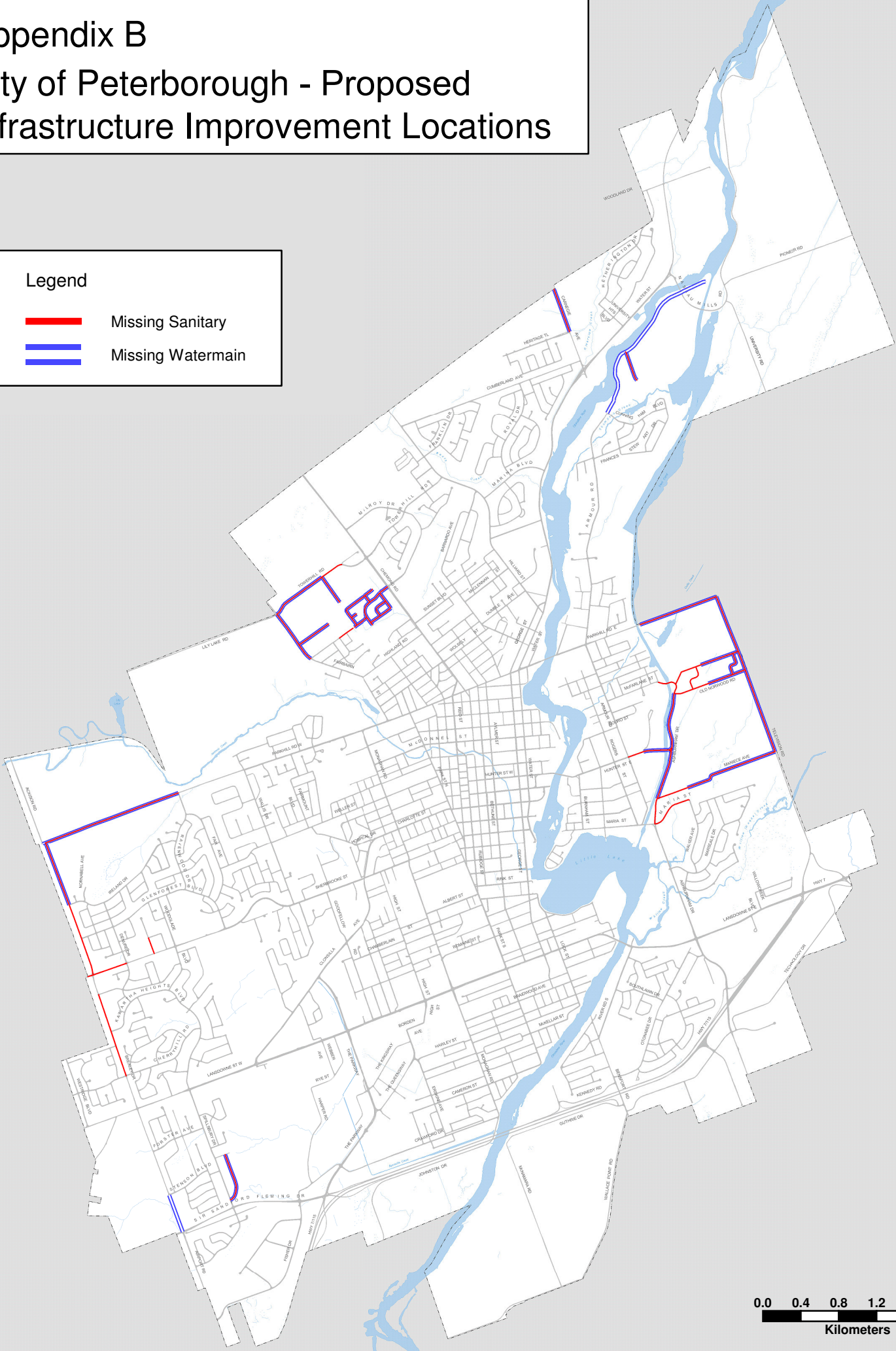
# Appendix B

## City of Peterborough - Proposed Infrastructure Improvement Locations



**Legend**

-  Missing Sanitary
-  Missing Watermain



### Appendix C - Potential Capital Program to Service Selected Areas in the City

Using 4% construction Cost Index on 2010 Dollars

Annexed	Location	Total Cost
1900	ASHBURNHAM DR	\$4,060,507.75
1900	HUNTER ST E	\$862,312.28
1900	MARIA ST	\$497,308.18
1900	MCFARLANE ST	\$413,620.35
1963	BREALEY DR	\$6,393,808.20
1963	GREEN BV	\$1,431,940.60
1963	PYWOOD RD	\$417,160.00
1963	PARKHILL RD E	\$6,706,806.60
1963	SHERBROOKE ST	\$1,020,247.80
1966	ARMOUR RD	\$4,547,408.45
1966	INFCE DR	\$950,485.00
1998	CARNEGIE AV	\$1,410,710.95
1998	MCFARLANE AV	\$1,791,747.75
1998	MANICE AV	\$2,787,993.00
1998	NASH DR	\$699,209.95
1998	OLD NORWOOD RD	\$2,115,329.80
1998	TELEVISION RD	\$5,147,869.35
1998	TRENTVIEW RD	\$356,608.20
2008	DANIEL ST	\$1,625,070.55
2008	DEWAR CR	\$192,570.30
2008	FARBARN ST	\$1,740,494.95
2008	HILLSIDE ST	\$947,312.95
2008	HILLVIEW DR	\$951,957.00
2008	MARTIN RD	\$758,209.75
2008	MCCREA DR	\$1,124,799.00
2008	O'LEARY AV	\$628,356.30
2008	SCOLLARD RD	\$261,472.60
2008	SIMONS AV	\$1,537,146.00
2008	THORBURY DR	\$790,009.30
2008	TOWERHILL RD	\$2,470,047.45
		<b>\$55,223,572</b>

2020	2020 indexed & rounded	2021	2021 indexed & rounded	2022	2022 indexed & rounded	2023	2023 indexed & rounded	2024	2024 indexed & rounded	2025	2025 indexed & rounded	2026	2026 indexed & rounded	2027	2027 indexed & rounded	2028	2028 indexed & rounded	2029	2029 indexed & rounded	Total	Indexed Total		
\$	-	\$	-	\$	-	\$	-	#####	\$ 7,040,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 4,060,508	\$ 7,040,000
\$	-	\$	-	\$	-	\$	-	\$ 882,312	\$ 1,530,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 862,312	\$ 1,530,000
\$	-	\$	-	\$	-	\$	-	\$ 497,308	\$ 870,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 497,308	\$ 870,000
\$	-	\$	-	\$	-	\$	-	\$ 413,620	\$ 720,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 413,620	\$ 720,000
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\$	-	\$ 417,160	\$ 650,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 417,160	\$ 650,000
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\$	-	\$	-	\$	-	\$	-	\$	-	#####	\$ 5,030,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 2,787,993	\$ 5,030,000
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 689,210	\$ 1,300,000	\$	-	\$	-	\$	-	\$	-	\$ 689,210	\$ 1,300,000
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	#####	\$ 3,970,000	\$	-	\$	-	\$	-	\$	-	\$ 2,115,329	\$ 3,970,000
\$	-	\$	-	\$	-	\$	-	\$	-	#####	\$ 5,670,000	\$	-	\$	-	\$	-	\$	-	#####	#####	\$ 5,147,869	\$ 9,890,000
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\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	#####	\$ 3,170,000	\$	-	\$	-	\$	-	\$ 1,625,070	\$ 3,170,000
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 575,061	\$ 1,130,000	\$	-	\$	-	\$ 575,061	\$ 1,130,000
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 192,570	\$ 380,000	\$	-	\$	-	\$ 192,570	\$ 380,000
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\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 951,957	#####	\$	-	\$ 951,957	\$ 1,930,000
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 758,209	\$ 1,480,000	\$	-	\$ 758,209	\$ 1,480,000
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	#####	#####	\$ 1,124,799	\$ 2,280,000
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$ 628,356	\$ 1,230,000	\$	-	\$	-	\$ 628,356	\$ 1,230,000
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\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	#####	\$ 5,210,000	\$	-	\$	-	\$ 2,470,047	\$ 5,210,000
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Unfunded (\$Mill)  
Funded (\$Mill)

##### \$75,544,152 \$71,945,918 \$66,813,755 \$60,316,305 \$52,568,958 \$43,971,716 \$34,950,585 \$25,448,608 \$16,806,552 #####