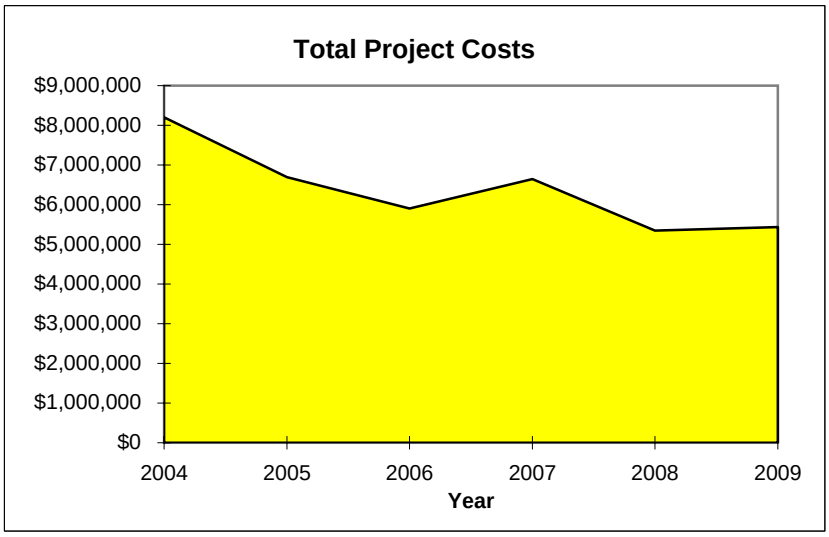
2004
Capital Budget
Capital Improvement Program

Agency Name: **Sewer Utility** **Agency Number:** 54

	Project Name	Capital Budget 2004	Future Year Estimates 2005	2006	2007	2008	2009
1	Eng. Service Building Expansion	$ 900,000	$ 0	$ 0	$ 0	$ 0	$ 0
2	Vactor w/Chassis	250,000	257,500	260,000	0	265,000	0
3	Laptops for Field Operations	0	0	0	0	0	0
4	Trenchless Rehab Contract	50,000	51,500	53,045	54,636	56,275	57,964
5	Lateral Abandonment Contract	25,000	25,750	26,523	27,318	28,138	28,982
6	Sewer Repair Van	40,000	41,200	0	43,709	0	0
7	Hydraulic Jetter	125,000	0	132,613	0	140,689	0
8	Utility Locating & Marking Vehicles	23,333	0	0	0	0	0
9	Constr Item Record Account/Diary	0	0	0	0	0	0
10	Robotic Survey Equipment	0	0	0	0	0	0
11	Hoard Street Area Sewer Replace	330,000	330,000	0	0	0	0
12	East Wash Ave San Sewer Replace	1,300,000	800,000	300,000	1,050,000	0	0
13	Lead Service Replacements	475,860	490,136	504,840	519,985	535,585	551,652
14	Sewer with Reconstructed Streets	3,750,000	3,750,000	3,750,000	3,750,000	3,750,000	3,750,000
15	Improvements to Sewer Study Areas	250,000	250,000	250,000	250,000	0	0
16	Lift Station Rehabilitations	75,000	100,000	100,000	100,000	100,000	100,000
17	Additions to Collection System	360,000	200,000	200,000	200,000	200,000	200,000
18	Other Major Sewer Repairs	150,000	150,000	150,000	150,000	150,000	150,000
19	Pennito Creek Sewer Creek Reline	100,000	0	0	0	0	0
20	Field Operations Equip & Vehicles	0	250,000	175,000	500,000	125,000	600,000
	Total	$ 8,204,193	$ 6,696,086	$ 5,902,020	$ 6,645,649	$ 5,350,687	$ 5,438,598



2004
Capital Budget
Expenditure Categories and Funding Sources

Agency Name: **Sewer Utility** **Agency No.:** 54

All Projects	Capital Budget	Future Year Estimates				
	2004	2005	2006	2007	2008	2009
Expenditures:						
Planning Studies	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Eng / Design	420,000	355,000	325,000	325,000	300,000	300,000
Land Acquisition	100,000	50,000	50,000	50,000	0	0
Land Development	0	0	0	0	0	0
Construction	7,185,860	5,742,386	4,959,408	5,726,940	4,519,998	4,538,598
Remodelling	0	0	0	0	0	0
Equipment/Furnish	498,333	548,700	567,613	543,709	530,689	600,000
Cost Applied	0	0	0	0	0	0
Other	0	0	0	0	0	0
Total Costs	$ 8,204,193	$ 6,696,086	$ 5,902,020	$ 6,645,649	$ 5,350,687	$ 5,438,598
Funding Sources:						
Available Funds	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
Federal Sources	0	0	0	0	0	0
State Sources	0	0	0	0	0	0
County Contrib	0	0	0	0	0	0
Private Contrib	0	0	0	0	0	0
TIF	0	0	0	0	0	0
Revenue Bonds	5,413,726	4,222,456	3,706,313	4,189,672	3,347,946	3,405,088
Utility Reserves	2,430,468	2,273,630	1,995,707	2,255,977	1,802,740	1,833,509
Special Assessments	360,000	200,000	200,000	200,000	200,000	200,000
Other	0	0	0	0	0	0
Total "Other"	$ 8,204,193	$ 6,696,086	$ 5,902,020	$ 6,645,649	$ 5,350,687	$ 5,438,598
G.O. Debt	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0

Capital Budget

Sewer Utility

Eng. Service Building Expansion Project No. **1** Fund No.

GO	$ 0
Other	900,000
	$ 900,000

Construction of a 2-story, energy-efficient addition to the existing facility providing an additional 8,500 square feet of space and renovation of the adjoining 2,500 square feet of existing space. The existing ESB is severely undersized and currently houses more 80 employees. The expanded facility would house overcrowded staff in the Construction Inspection, Operations, Special Services and Mapping Sections of the Engineering Division. These personnel are presently located at two separate facilities. The CCB office space vacated by Special Services and Mapping staff, in turn, will provide space for the overcrowded Street, Sanitary and Storm sections. Additionally, the existing ESB is extremely energy inefficient. (60% Sanitary Sewer Utility; 30% Stormwater Utility; 10% Landfill Remediations Fees - cost represents Sanitary portion only).

Vactor w/Chassis Project No. **2** Fund No.

GO	$ 0
Other	250,000
	$ 250,000

Vactor w/chassis to replace Vehicle #3112. Vehicle being replaced exceeds 7 years of age. Reliable sewer cleaning equipment is essential to maintaining proper operation of the City's sanitary sewer system. This vehicle is required to maintain the current level of service provided. Future years' spending is to replace other City vactors per established equipment replacement plan.

Laptops for Field Operations Project No. **3** Fund No.

GO	$ 0
Other	0
	$ 0

Replacement of outdated laptops. These laptops are used by sewer cleaning and repair crews to access digital maps of the City's storm and sanitary sewer facilities. This allows crews to retrieve necessary information in field more quickly and focus on their primary job responsibilities. Personnel are able to accurately locate facilities and perform their jobs more efficiently. Laptops will be equipped with touch screen and wireless ready. They are ruggedized to withstand the conditions encountered in field operations. (67% Sanitary Sewer Utility; 33% Stormwater Utility - cost represents Sanitary portion only). Future years' spending is to replace other laptops per established equipment replacement plan.

Trenchless Rehab Contract Project No. **4** Fund No.

GO	$ 0
Other	50,000
	$ 50,000

Contract to provide trenchless repairs to sanitary sewer lines that cannot be accessed via open trench method. This contract enables the City to repair sanitary sewer lines not scheduled for replacement that are not suitable for traditional open trench method of construction. This is important to ensure that the system is maintained in peak operating condition thus extending its useful life and further reducing the number of sewer back ups experienced by citizens. This is an annual project.

Lateral Abandonment Contract Project No. **5** Fund No.

GO	$ 0
Other	25,000
	$ 25,000

Contract for short liners to abandon laterals (that portion of the building sewer located in the right-of-way) that are no longer in service. This project provides for abandoning laterals from the main without excavation. Previously, laterals were abandoned by capping the line at some point on the owner's property. With the increase in directional boring, this process posed a problem for the City's sanitary sewer system. If an abandoned lateral was hit during a bore the drillers mud was able to freely travel into the City's main via the abandoned lateral. This resulted in sewer back ups into citizens' basements. An additional benefit of the liner is that the lateral can be restored at a later date without excavation. If not funded in the 2004 budget the procedure for capping abandoned laterals will revert to the previous method. This is an annual project.

Sewer Repair Van Project No. **6** Fund No.

GO	$ 0
Other	40,000
	$ 40,000

This heavy duty utility vehicle will replace vehicle #2356 which is eight (8) years old and has exceeded its useful life. This vehicle is used by Sewer Repair Leadworkers to transport the necessary supplies, tools and equipment used to perform sewer repairs City wide. Reliable equipment is essential is required to maintain the current level of service provided. (67% Sanitary Sewer Utility; 33% Stormwater Utility - cost represents Sanitary portion only). Future years' spending is to replace other sewer repair vans per established equipment replacement plan.

Hydraulic Jetter Project No. **7** Fund No.

GO	$ 0
Other	125,000
	$ 125,000

Newer, safer, more effective technology to replace oldest mechanical rodder #3309 which has exceeded its useful life. Additionally, the rodder technology is becoming more and more outdated. This new equipment will enable the City to meet its cleaning goal more effectively and safely. While the Engineering Operation's Section has a very low on-the-job injury rate the majority of such injuries have been related to working on the rodder. Future years' spending is to replace other City rodders per established equipment replacement plan.

Utility Locating & Marking Vehicles Project No. **8** Fund No.

GO	$ 0
Other	23,333
	$ 23,333

Replace two (2) existing large cargo vans with two (2) new vehicles that are more energy-efficient. The existing vehicles have exceeded their useful life. Reliable equipment is essential to maintaining proper operation of the City's sanitary sewer and storm drainage systems. These vehicles are required to maintain the current level of service provided. In addition to utility locating these vehicles are used to perform sanitary access structure inspections and monitoring of industrial discharge. (67% Sanitary Sewer Utility; 33% Stormwater Utility - cost represents Sanitary portion only).

Constr Item Record Account/Diary Project No. **9** Fund No.

GO	$ 0
Other	0
	$ 0

Development of an electronic Construction Item Record Account/Diary System - automated system for capturing, storing and accessing information about public works construction projects. The Construction System will feature mobile units for field data collection, a database to store the field-collected data, and a range of reporting and connectivity options to help make the collected data as useful as possible. It will be designed to replace the manual, paper-based system in use and to substantially reduce the costs of processing and accessing inspection information. (Costs shared equally among Sanitary Sewer Utility, Stormwater Utility and General Fund - cost represents sanitary portion only).

Robotic Survey Equipment Project No. **10** Fund No.

GO	$	0
Other		0
	$	0

Robotic Total Station. Total Station will be used to collect mapping records, topographic data required for the design of Public Works Projects and perform construction layout of Public Works Projects. A survey crew on construction layout can be reduced from a three-person crew to a two-person crew utilizing a robotic total station resulting in a decrease in labor costs. At times a survey crew collecting topographic data may be reduced to a one-person crew. This equipment will also increase productivity, efficiency and accuracy. GPS will be used to aid in asset management and as-built record keeping. The information gathered will be used to populate the GIS data base. This equipment and information will be available to other Public Works Agencies. Costs shared equally among Sanitary Sewer Utility, Stormwater Utility and General Fund. Cost represents Sanitary Sewer Fund portion only.

Hoard Street Area Sewer Replace Project No. **11** Fund No.

GO	$	0
Other		330,000
	$	330,000

In 1993 and again in 1996, residents in this area (several blocks centering around Hoard at Kedzie) suffered sanitary sewerage flooding into their basements. Subsequently, the City performed a detailed study to seek solutions to lessen the chance of future flooding. Implementation for this area began with the replacement of the sewer interceptor on Johnson Street in 1997. This is Phase 3. Included streets are Kedzie from E Johnson to E Washington, East Lawn from North to Kedzie, and E Dayton from North to Kedzie. Phase 4 in 2005 will include E Johnson from North Lawn to E Washington, E Washington from E Johnson to Oak, Oak from E Washington to Hoard, and Hoard from Oak to Street End. The budget requests under this item are only for sanitary sewer related costs. Street and Storm Sewer costs are budgeted separately.

East Wash Ave San Sewer Replace Project No. **12** Fund No.

GO	$	0
Other		1,300,000
	$	1,300,000

This project is the replacement of existing, aged sanitary sewer facilities in the East Washington Avenue street right-of-way and some adjoining side streets, in conjunction with a proposed major street reconstruction project over several years. It is anticipated that the project shall consist of a few abandonments and many replacements. Design work was completed in 2003 with Phase 1 construction to start in 2004. Subsequent phases are preliminarily identified in future years. Cost estimates shall be refined in future budgets as engineering work progresses.

Lead Service Replacements Project No. **13** Fund No.

GO	$	0
Other		475,860
	$	475.860

The City has embarked upon a program to replace existing water services that were installed using lead pipe. The goal of the program and a requirement of the stipulation executed by the City with the Wisconsin Department of Natural Resources is to replace all lead services within 10 years commencing in 2001. This requires the replacement of approximately 650 - 660 services per year at an estimated average cost to the property owner of $1,400 per service of which one-half the cost (up to $1,000) is rebated by the City.

Funding for the program is from communication rental fees from the City's elevated water tanks and the Madison Sewer Utility, the latter being in recognition of the avoidance of placing phosphorous compounds in the public water supply - the other alternative which was considered.

Sewer with Reconstructed Streets Project No. **14** Fund No.

GO	$ 0
Other	3,750,000
	$ 3,750,000

This project involves replacement of older, problematic sanitary sewers in conjunction with street reconstruction projects and street resurfacing. This is primarily replacement of 6 inch diameter sewers, which are not installed as mains using today's standards. Replacement of these sewers is best done when the street is being reconstructed, to save on cost and inconvenience to the public. Additionally, the City encourages residents to replace the portion of their sewer lateral that lies within the public right-of-way. This is done by offering to pay for 75% of the replacement cost in accordance with a policy adopted by the City in 1997. All 6 inch mains under 'reconstruction' streets will be replaced. Those 6 inch mains under 'resurfaced' streets are evaluated for replacement on a case-by-case basis. This item includes proposed work in the Moland Street area estimated at $190,000.

Improvements to Sewer Study Areas Project No. **15** Fund No.

GO	$ 0
Other	250,000
	$ 250,000

This project is for the construction of: (1) a large sanitary sewer interceptor in the Midvale area from Regent to University and/or nearby streets; (2) sewer line relining and manhole rehabilitation in the Truax area to reduce clear water inflow and infiltration; and (3) an intermediate lift station in the Olbrich Park area to reduce flooding potential. These projects are the systematic, prioritized implementation of recommended sanitary sewer improvements contained in ongoing engineering studies to deal with flooding related problems.

Lift Station Rehabilitations Project No. **16** Fund No.

GO	$ 0
Other	75,000
	$ 75,000

This project is for necessary capital improvements to any of the City's 28 public sewerage lift stations. These stations need periodic improvements beyond the normal operating maintenance expenditures. These improvements reduce operating costs, improve efficiency, or bring the station into compliance with present standards for design, safety, and operation. Potential project work is proposed for the Fremont Pump Station Wetwell design investigation. No other projects are proposed for 2004, but a $50,000 item is included for contingency - emergency. Minor station upgrades by Madison Metropolitan Sewerage District (MMSD) are covered by the Operating Budget.

Additions to Collection System Project No. **17** Fund No.

GO	$ 0
Other	360,000
	$ 360,000

This project finances assessable sewer facilities for development and / or services. Most projects cannot be easily predicted in advance as they are driven by development pressures. Potential projects include: Initial survey, design and land acquisition for the Burke Annexation East of the Interstate and South of the railroad tracks to Milwaukee Street (centered around Lien and Felland); potential extensions in the Upper Sugar River Watershed (West Side and Mid Town Road Neighborhoods); and other smaller extensions that may arise. Other funding is to be derived from special assessments.

Other Major Sewer Repairs Project No. **18** Fund No.

GO	$ 0
Other	150,000
	$ 150,000

This project is for urgent and emergency type repairs that are separate from new extensions or accompanying street construction. These projects arise on very short notice and are unpredictable from year to year. One planned major project is a sewer replacement (or rehabilitation) in coordination with shoreline improvements along Lake Monona in the Hudson Beach area. Estimated cost of this project is $100,000.

Pennito Creek Sewer Creek Reline Project No. **19** Fund No.

GO	$	0
Other		100,000
	$	100,000

This project is to re-line an existing 12 inch vitrified clay pipe gravity sewer interceptor. Said pipe collapsed in 1999 causing an emergency sewer repair. Upon repair and further investigation, it was determined that the pipe joints were allowing considerable infiltration - allowing ground water into the sewer system and leaving the pipe vulnerable to soil migration and / or another collapse. Re-lining of the sewer is a cost effective repair for a problem of this type.

Field Operations Equip & Vehicles Project No. **20** Fund No.

GO	$	0
Other		0
	$	0

Projections for future years' expenditures to replace and update cleaning and repair vehicles and equipment per established equipment replacement plan. Reliable equipment is essential is required to maintain the current level of service provided. (67% Sanitary Sewer Utility; 33% Stormwater Utility - cost represents Sanitary portion only). If equipment is not replaced as scheduled operating costs will be higher due to increased maintenance costs and productivity will be lower due to increased down time.

Note: Unless otherwise specified, "other funding" for Sewer Utility projects is derived from Utility reserves or revenue bonds.

2004
Capital Budget
Summary

Agency Name: **Sewer Utility** **Agency Number:** 54

	Project Name	Agency Request	CIRC	Executive	Executive		
					G.O. Debt	Other Funding	Total
1	Eng. Service Building Expansion	$ 900,000	$ 900,000	$ 900,000	$ 0	$ 900,000	$ 900,000
2	Vactor w/Chassis	250,000	250,000	250,000	0	250,000	250,000
3	Laptops for Field Operations	6,667	0	0	0	0	0
4	Trenchless Rehab Contract	50,000	50,000	50,000	0	50,000	50,000
5	Lateral Abandonment Contract	25,000	25,000	25,000	0	25,000	25,000
6	Sewer Repair Van	40,000	40,000	40,000	0	40,000	40,000
7	Hydraulic Jetter	125,000	125,000	125,000	0	125,000	125,000
8	Utility Locating & Marking Vehicles	23,333	23,333	23,333	0	23,333	23,333
9	Constr Item Record Account/Diary	8,333	0	0	0	0	0
10	Robotic Survey Equipment	16,667	0	0	0	0	0
11	Hoard Street Area Sewer Replace	330,000	330,000	330,000	0	330,000	330,000
12	East Wash Ave San Sewer Replace	1,300,000	1,300,000	1,300,000	0	1,300,000	1,300,000
13	Lead Service Replacements	475,860	475,860	475,860	0	475,860	475,860
14	Sewer with Reconstructed Streets	3,750,000	3,750,000	3,750,000	0	3,750,000	3,750,000
15	Improvements to Sewer Study Areas	250,000	250,000	250,000	0	250,000	250,000
16	Lift Station Rehabilitations	75,000	75,000	75,000	0	75,000	75,000
17	Additions to Collection System	360,000	360,000	360,000	0	360,000	360,000
18	Other Major Sewer Repairs	150,000	150,000	150,000	0	150,000	150,000
19	Pennito Creek Sewer Creek Reline	100,000	100,000	100,000	0	100,000	100,000
20	Field Operations Equip & Vehicles	0	0	0	0	0	0
	Total	$ 8,235,860	$ 8,204,193	$ 8,204,193	$ 0	$ 8,204,193	$ 8,204,193