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City of Beverly

Capital Expenditure Plan

2015



Presented by:

Mayor Michael P. Cahill

2015 CAPITAL EXPENDITURE PLAN

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Introduction

The Beverly City Charter calls for an annual submission by the Mayor of the City's capital improvement plan. The plan must include a list of all capital improvements proposed to be undertaken over the next five years however we feel it is important as a City to look beyond those five years. Therefore we have included the projects we feel will require attention within the next ten years to help aid in long term financial and service planning. It is also important to recognize that in addition to the foreseeable needs outlined in this plan that occasional capital needs arise unexpectedly. This plan should help to determine priorities and affordability of both the known investments and the occasional unexpected. As part of the plan development many assumptions need to be made. Costs of expenditures, timing of borrowing, market interest rates for short and long term loans and budgetary capacity for debt service are among those assumptions. Although the many assumptions are reasonable it is recognized that the plan is subject to change as those assumptions do.

While the Capital Expenditure Plan is largely a discussion document and no project outlined herein can proceed without separate, specific individual City Council approval, the anticipated increase in the debt service budget as well as stabilization balances are outlined in the attached schedules and are considered as available resources to fund the City's annual debt service. Priorities and cost estimates often change and this document serves to allow for effective discussion of such changes.

City Hall

City Hall is the face of our municipal government. The original part of the building is rich in history dating to the 18th century while the "newer" section is from the 19th century. As with many older buildings ongoing maintenance is required to preserve and improve the asset. Because the City performed significant roof and façade work this past year, attention can begin to focus on the heating system which is old and inefficient. A few years ago two new boilers were purchased and placed in the basement of the adjacent Police Station with the intent of heating City Hall. A full review and study is suggested to ensure that construction of this heating system will distribute the heat in the most efficient way. This will take place in a subsequent year. This heating change will ultimately allow us to more efficiently heat the building and achieve a huge improvement in the comfort level within the building as well as reduce our overall environmental impact. We will be using a much cleaner fuel to heat the building to achieve this. The city has already made improvements to the existing heating system that have allowed us to cut our fuel consumption in half but there is an opportunity as discussed above to be even more efficient.

Public Safety Facilities

Currently the City operates three fire houses and one police station to meet its public safety needs. Fire houses are located strategically in the areas of North Beverly, Beverly Farms and Downtown to allow multiple access routes to all areas of the City while avoiding unnecessary travel delays. The central fire station remains in good working order and despite being built in

1954 the major capital components are in fair shape. The exceptions are the windows and the boiler. In fiscal year 2015 the City budget allotted funds within the Fire Department budget to address the needed window replacement, however unforeseen needs in other stations may postpone that work to next fiscal year. The project scope is also a bit larger than first thought and the estimated cost has increased to as much as \$150,000. Additionally, the boiler is dated and in need of replacement however it continues to function and will be addressed when the situation warrants. Expected costs for boiler and system replacement is estimated to be around \$75,000.

The North Beverly fire station has been challenging this past fiscal year. Although the overall building is sound, newer equipment has placed additional demands on the building that must be addressed in the very near future. The City is working with engineers to devise an appropriate method of reinforcement of the concrete flooring. This will prolong the useful life of the building and allow the larger trucks of the fleet to safely be housed there. This building will also require significant heating work to replace the existing boiler, which is from 1947. Both of these undertakings combined could run in the \$250,000 to \$450,000 range. A combination of an allocation within the fire department operating budget along with a subsequent appropriation request would account for the cost once we determine more accurate figures. No capital needs are currently scheduled at the Beverly Farms station, however the second garage bay door will require some expansion in the future to accommodate some of the larger equipment.

The City's Police station is dated. Space constraints and layout of the facility are limiting and any renovations to the facility would not solve many of those challenges. More than a decade ago detailed construction plans were developed to allow the community to choose between a new combined public safety facility (police and fire) or a new stand-alone police station, however affordability continues to be a major hurdle in undertaking those efforts despite the clear need. Dated estimates put the cost of a new facility in the \$15M range and this plan places this capital need next in line behind the new middle school with a place holder value of \$20M.

The City does have the rights at no cost to locate a public safety facility at Cummings Center on a two acre parcel bordering the railroad tracks and Elliott Street (Route 62) across from the intersection of McPherson Drive and Elliott Street. You'll note in the Debt schedules that the affordability of this project places it out many years thus we expect significant opportunity for input regarding the approach of supporting the cities need in this area. Both our police and fire stations will need to be considered as we move forward in our long term planning.

The City houses two separate dispatch areas within its public safety facilities. The central fire station houses all fire box and alarm equipment and provides the fire dispatch for the City. The police station houses a dispatch center as well and receives all 911 emergency calls for the city. Fire related calls are transferred to the central fire and all others are dispatched directly from the police station. Regular hardware and software upgrades have been placed on hold in recent years in anticipation of the City joining the Essex County Regional Dispatch Center. As the City continues to evaluate its dispatch options, it is clear that investments in equipment will be required regardless of where its dispatch functions are housed. Initial rough estimates place an investment floor at \$50,000 for minimal upgrades however depending on the resulting structure, consolidated dispatch functions of police and fire could cost up to \$350,000, much of which

could be eligible for state grant funds. The City continues to evaluate the options with public safety and financial impact being major considerations. At this point, none of the options would require a borrowing and any initial investments are expected to be offset by budgetary savings within the operating budget and potential grant opportunities.

Public Services Buildings

The current Public Services facility has been in use for close to 100 years. The buildings were designed for horse and wagon operations and originally housed only the City's Highway Division. Over the past 2 decades all Public Services operations have been moved to the Park Street facility and currently 7 different divisions operate in the same 1930's vintage buildings that have seen little improvement since constructed. Satellite storage areas throughout the City have also been sold leaving the Public Services Department with little capacity for properly storing its equipment. What little storage that is available remains in poor condition. Storing the equipment outdoors reduces its useful life and makes it difficult to access in adverse weather. This delays response times to street blockages and other storm damage during emergencies. It is also widely understood that the increased costs associated with improperly stored equipment such as shortened useful life and repair costs exceed the costs to build adequate storage facilities.

The motor pool is responsible for maintaining the City's fleet of equipment. The motor pool building has significant limitations. The building is not large enough to accommodate all of the mechanics. Additionally, employees must juggle the repair inventory to ensure vehicles being repaired are not trapped by ones needing more serious repairs. There is one door large enough to fit equipment through and some of the City's equipment cannot fit at all. The roof is too low to raise much of the equipment being repaired once inside and there is no lift to handle large trucks. In short, the building is truly inadequate, inefficient and unsafe. The roof of the building leaks as well.

The Water Division Building is newer (1960's) but poorly designed for the departments current operations. The garage bays are neither tall enough nor deep enough to safely house modern equipment. In addition, as is the case with all of the Public Services buildings, the roof leaks extensively.

The approach recommended to deal with these issues is a combination of short-term investment to repair leaking roofs and long term planning to address current and future needs of the Department. This past fall an appropriation of \$300,000 was made to address the leaking roofs in the three main buildings. This work will mitigate any further deterioration of the buildings and the equipment housed within them. The city will continue to evaluate a longer term solution for its storage and operational space needs. Preliminary findings of a review confirm the current facility is totally inadequate. Initial estimates and our budgeted debt service put replacement cost in the range of fifteen million dollars. This number provides for completely new facilities including sufficient space for all vehicle mechanics within the city to work under one roof. It is apparent that additional land is required to construct the facility. Productive, effective operations cannot be conducted without more space. Difficult decisions will need to be made and we anticipate ample process to allow for input and suggestions as we get closer to committing to this investment.

GAR Hall

The Grand Army of the Republic (GAR) Hall is located at 8 Dane Street and until recently it housed the City's Veterans Affairs department. Despite its historical value, the building remains in poor condition. Roof leaks, wood rot along with its age have contributed to the current condition of this asset. Much work is needed and an initial feasibility study is being recommended to the Community Preservation Committee to provide a more thorough assessment of the needs.

School Buildings

Most of Beverly's school facilities have been brought to a first class condition. The five Elementary schools in operation along with the McKeown School have all been renovated over the past two decades and the High School is Beverly's most recent school building accomplishment completed in 2011. Beverly's Middle School is the last of the buildings requiring reconstruction or renovation which the City is well underway with.

Briscoe Middle School

Briscoe is expected to remain Beverly's Middle School through the 2017/2018 school year. Although ongoing maintenance continues on this building which was constructed in 1923, we do not anticipate any significant investments to the building prior to its closing.

New Middle School

Extensive efforts have been ongoing with regard to a new middle school for more than a year. The City has put in place a School Building Committee and this past spring Beverly was invited into the feasibility and schematic design phase of the Massachusetts School Building Authority's (MSBA) school building process. The City has contracts with Heery International to serve as the Owner's Project Manager (OPM) as well as with AI3 to serve as the building designer. The City submitted its Preliminary Design Schematic to the MSBA earlier this calendar year and upon approval of the MSBA board, Beverly will be invited to move forward in the process and become eligible for reimbursement of the construction project per MSBA's guidelines. The net cost to Beverly through the Feasibility study and schematic design phase will not exceed \$750,000. These funds have already been appropriated as a bond authorization however we do not anticipate the need to burden the debt budget and intend to utilize short term principal payments to avoid a borrowing. After a robust study consisting of nine various options, it was determined that the most economical way to address projected enrollments and educational needs of the district will be to build an all new middle school located at the Memorial building site. The projected time line will result in a September 2018 opening of the new Beverly Middle School.

At present, assumptions are necessary to arrive at an expected net cost to the City. The current cost estimates continue to be refined. As of this report, the total cost of the project is estimated to cost between \$115.3M and \$123M. This figure will be refined during the schematic design phase over the next few months. Another major assumption is the amount of MSBA

participation in the project. Although the MSBA states the current reimbursement rate for Beverly to be 51.42%, Beverly is expecting to receive additional bonus percentage points that may bring this rate to 55.92%. Currently, MSBA excludes certain components from reimbursement and in addition the reimbursement for various cost categories are capped. The largest unknown at this point is how much overall construction cost per square foot the MSBA will participate in. Cost estimators are projecting cost escalation for recent and future projects to exceed the current MSBA cap for construction costs by over \$100 per square foot. This means that a risk exists for Beverly to pay the full cost of anything over the current MSBA cap rate of \$287/square foot. The MSBA is scheduled to revise this figure later this year, and the Administration is working with the state Treasurer's office, MSBA staff and other school districts to advocate for a higher reimbursement rate. Due to this large unknown, we are modeling what we feel are the lowest possible and highest possible net costs to the city. We have therefore included two debt models in this plan, one for a net cost of \$53.5M and one for the net cost of \$69.1M.

Roads and Sidewalks

Within the last few years we have developed sophisticated pavement management tools that tell us that we need to increase our funding of road repairs by 50% in order to start to make progress towards a higher level of service. Using this information we have been able to direct additional funding to our paving program for a few years now. Our goal is to continue this for as long as possible with a short term goal of significantly increasing our investment to roughly \$3M a year for the upcoming year to match what we have done this past year.

The state is our primary source of paving revenue provided by the gas tax. We are encouraged that the administration has released additional funds and we hope this continues for future years. Combining this with an annual city appropriation is expected to provide the city with roughly \$2.9M in resources for the upcoming year. This remains an investment that is critical to improving our 150 miles of road way.

We embrace the latest pavement preservation technologies to protect our investment while at the same time we are working with leaders in the field to develop new techniques to make sure this huge investment in our most valuable asset is protected.

We will continue to connect neighborhoods with large new sidewalk projects while also repairing our existing network. Of course we will also incorporate ADA improvements in all of this work to increase access for all residents and guests.

Brimbal Avenue Interchange Upgrade

Preparation continues for the connector road work to begin this spring. The City has secured a \$5M grant to fund the construction of roadway that connects Sohier Rd. with Brimbal Ave. It has long been understood by residents, local officials and state officials that this connector road is a highly dysfunctional intersection. The solution that will be put in place places a roundabout

at either end of the connector road to aid with traffic flow and safety. The City has long discussed this road as being phase one of an interchange project with phase two including direct access to Dunham Rd. mitigating traffic flow from the Brimbal Ave. area. The second phase remains conceptual and the City continues to work with residents of the Dunham Rd. area as well as state officials to develop an attainable solution. It is likely that any phase two project would take some time to develop and it is the City's expectation that funding of this type of project would fall outside the City's operating budget therefore we have not included any costs associated with it in the debt models.

RTE 1A

This vital project will breathe new life into one of our most important thoroughfares and neighborhoods. After many years of design and planning we are finally ready to bid and build this project.

The project starts at the base of the bridge to Salem and ends almost two miles later by our Memorial building. It will consist of all new sidewalks and streetscape and decorative lighting to go along with a brand new road.

The project is expensive at close to \$22M but the funding is provided by the federal government so we do not have to provide for it in our plans. It is such an important project for the City and will transform that area into a first rate thoroughfare.

Bass River

Dredging of the Bass River has long been noted as a need to allow improved access along the river. The City completed the sampling of the river which is required before any dredging could commence. Additionally the permitting for the dredging of the upper river is in place with the lower river portion expected to be submitted for full permitting by the end of the fiscal year. The funds required to perform the dredging have yet to be identified. However we anticipate working with State officials and local residents to help identify and secure the necessary funding sources to move forward with this project.

Fire Engines

The City purchased and outfitted two new pumper fire engines this past fiscal year which are great additions to the fleet. The acquisition of these engines will ensure that our fire response capabilities are state-of-the-art. With newer front line equipment in place we can begin to turn our attention to less expensive equipment purchases and back up capabilities.

In addition to the large front line engines, the City historically has kept older vehicles for back up purposes. The backup ladder truck is aging and will need some attention in the next couple of years to ensure its compliance with safety and regulatory standards. Additionally, the Fire department utilizes some smaller vehicles for dive activity, hazardous waste removal, contamination management, forest fires and a number of other purposes. These vehicles tend to be less expensive than the larger engines, but nevertheless require ongoing turnover to ensure

safe and effective emergency response. The City expects 1 to 2 of these smaller vehicles requiring replacement over the next two years. The upcoming 2016 budget proposal will seek to address these needs to avoid borrowing for these capital purchases.

Public Services Vehicles

The Public Services fleet includes a large number of vehicles, trailers, specialty equipment and heavy machinery. The fleet is so large that it's imperative we continue to have an equipment replacement schedule and spread out replacement costs equally over many years on a rolling basis. This strategy avoids putting the city in a position where major investment would be required in a shorter period of time. Also, continuing with a modest plan that provides a few new pieces each year will help keep the Department efficient and help hold down repair costs and maximizes staff time. It has been recent practice to include funding within the operating budget for this purpose and we expect that practice to continue in the future.

A commonly used truck in the DPS fleet is the so called "one-ton." These trucks are used in support of a number of functions within the Department. At least one per year need to be purchased for the next few years to build the fleet back up. Each truck now costs approximately \$75,000 with snow removal equipment.

There are many critical pieces to our fleet such as large front-end loaders and backhoes. Like all of the fleet our current stock is old and in need of replacement. At least \$150,000 should be provided for replacing one piece per year.

The workhorses of the fleet are our medium duty trucks and they are in terrible condition. The bulk of the fleet is 17 years old and a few pieces date to the mid 1980's. Rust has taken its toll and we desperately need replacement trucks at an estimated price of \$180,000 each. At least one per year should be budgeted.

It is our intent to fund these capital expenditures from operations whenever possible, i.e. in years which generate positive financial variances from operations. We have historically allocated \$250,000 to the Public Services budget for this purpose and you will note those expenses not being bonded as they are appropriated directly each year. We anticipate continuing this strategy each year moving forward.

Beverly Golf and Tennis Club

Improvements continue to be made to this facility including both interior and exterior work. Building preservation, mechanical system renovations and handicap accessibility continue to be the focus of these investments moving forward. Improvements are funded through the Golf and Tennis Enterprise Fund. A modest \$75,000 was provided in the FY15 budget and it is expected that an annual investment will continue barring any unforeseen competing demands.

Communications Upgrade – Fiber Cabling and Phone Systems

By running its own fiber loop, the City is now able to accommodate several municipal networks securely at higher speeds (City and School data and voice, facility networks and secure police networks/cameras). This approach will allow the City to consolidate telephone lines, data lines and even whole phone systems. The next step in the City's communication upgrade is to address the dated telephone system. We have begun to explore consolidated VOIP systems which would provide enhanced capabilities and system redundancy. Initial estimates place a city-wide consolidated phone network in the \$300,000 range. It is expected that any investment would be funded through an annual budget request. At that time a plan would be presented to show the savings that would be generated by using the new network and the subsequent return on investment.

LED Street Light Conversion

The city purchased all of the street lights in the city from our electrical supplier in the spring of 2013. This resulted in an immediate reduction in the cost of operation of close to \$250,000 annually. It has always been our intention to replace the current fixtures, which are using high pressure sodium lamps, with new fixtures using light emitting diodes (LED) for their light source. This should allow us to considerably reduce our energy consumption for lighting as well as our utility expenses for the streetlights. Street lighting is currently one of our largest single sources of energy consumption.

At this time we are evaluating options and costs to see how best to proceed. The project is expected to cost somewhere between \$1 and \$1.5 million.

We expect this project to not only save energy but to provide better lighting and greatly reduce our maintenance needs.

Water, Sewer and Drainage

Flood control has been a major objective for nearly two decades. Significant time, effort and money have been invested in our storm water sewer system to mitigate flooding problems throughout the City. We have successfully completed the Chase Street project in Wards 2 and 3, the Lawrence Brook project in Ward 4, the Raymond Farms project whose benefits are most felt in Ward 5 and most recently the North Beverly project which benefits residents of Wards 5 and 3. The Chubb's Brook project in Ward 6 was in fact overwhelmed by the so-called Mother's Day storm of 2006 which lasted a week. That project is dependent on detention basins to slow the flow of water rather than large pipes which carry off the offending water. We designed additional improvements to the Chubb's Brook area which were constructed this past season to bolster the already proven detention ponds. We have designed an additional pond to increase our storage capacity and replacements for three sections of existing culverts that will provide additional relief. Two culvert replacements are being performed by other agencies at no cost to

the City other than design and permitting. The railroad completed replacement of its culvert and MassDOT will hopefully be able to replace theirs this summer. The third culvert, (under Haskell Street) was replaced with the help of a grant from FEMA to complete the work along with some other improvements in the area. These projects have been carefully designed to work together to minimize the risk of flooding in this flood prone area.

In addition to the larger projects that are constructed by outside vendors, the Department of Public Services constructs dozens of smaller projects each year to alleviate drainage problems. When the projects are constructed with City forces, the costs are modest and the work of high quality. Funding drainage repairs and extensions each year ensures that this effort can continue. Providing funding of \$100,000 - 150,000 each year allows several projects to be accomplished. We will continue to include an annual budget of \$125,000 in future Fiscal Years for this purpose.

In recent years we have reconstructed many brooks within the City. Years of neglect had left them choked with brush and debris. A small-scale program of ditch maintenance was begun several years ago to reclaim overgrown brooks and to maintain the newly refurbished waterways. This program is vital and should be expanded to allow clearing of some of the brooks within the flood prone areas in the City. \$50,000 will provide a basic level of service and allow the City to catch up with the substantial backlog of work.

Traveling under the downtown streets is a large diameter sewer that has been in place for over 100 years. Periodic cleaning is essential to maintain capacity and prevent blockages in large diameter sewers. This particular line has no record of being cleaned in the last several decades. Roughly 6,000 feet of pipe needs to be cleaned and inspected. This is the same line that has failed in other locations over the last few years. The last failure resulted in over \$300,000 being spent to repair one small section of pipe. The collapsed pipe caused significant stress to several businesses in the immediate area and disrupted traffic for weeks. a study of this line was funded in the 2015 budget and is complete. The line will be cleaned and inspected this spring and any shortcomings will be repaired next year. A large part of this line also runs under Rantoul Street which is slated for full reconstruction in the coming years.

Several water main projects are contemplated for the upcoming year. The goal of these specific projects is to bolster our ability to provide the highest level of service possible to our customers. The most significant project is the rehabilitation of the 12" water main that feeds the Beverly Farms section. The main was installed in the early 1930's and needs to be cleaned and lined to remove mineral buildup that is causing discolored water and reducing fire flow to the Farms. In total some 26,000 feet of pipe will have to be lined at a total cost estimated to be \$2,500,000. An authorization to borrow was approved in FY14 for this project.

To fully augment fire flows in the Beverly Farms area it is also necessary to upgrade a section of water main on Standley St. The section from Foster Street to Eagle Lane needs to be upgraded from six inch to sixteen inch pipe. The cost of this is anticipated to be \$800,000 and the authorization to borrow was approved by the city council in late FY14.

In conjunction with the culvert replacement on Haskell Street, it is proposed that the current 6-inch water main be replaced with a 12-inch main. This will provide the area with better water and of sufficient quantity to fight large fires. Current estimates put the cost at \$700,000.

Citywide Water Main Replacement

It is industry practice to allow for the renewal and replacement of water mains on an annual basis. A rule of thumb is to renew or replace 1% of total pipeline length every year with a goal that after 100 years, all the pipe in the system will have been replaced. Beverly has about 200 miles of water pipe within the City. The estimated cost includes engineering and construction costs to install about two miles of new pipe per year. The first goal of the program will be to install pipe in those areas of the City known to have problems of low water pressure or poor water quality. Overall, the program will also allow small mains to be replaced by new larger pipes and dead-ends looped. Current cost is estimated at \$1,000,000 per year which we will strive to incorporate into the annual water budget.

Citywide Gate Valve Replacement

There are almost 4,000 valves in the City's water system, some more than 100 years old. Many of these valves operate poorly which limits our ability to quickly control a water break. The Water Department is starting a unidirectional main flushing program. Unidirectional flushing is a very effective way to remove sediment from water mains, but it requires the operation of main valves. It is expected that this process will identify some valves that need replacement. The cost to replace a single valve averages \$2200. An estimated 50 valves will be replaced each year for a total cost of \$110,000 per year which will be built into the annual water budget.

Water & Sewer Vehicles

Rubber tired backhoes are vital for water and sewer work. These machines are used every day to perform emergency sewer and water repairs. Our two main machines are 13 and 17 years old. Both have over 15,000 hours of use and are still operating well but require more repairs each year. The repairs are also getting much more expensive and time consuming. We cannot provide basic service without functional backhoes.

It is proposed that we purchase one new backhoe this year. The cost of the machine is estimated to be \$120,000.

This division also is in need of a new dump truck and a utility truck. Together they will cost roughly \$225,000.

An ongoing expenditure of \$200,000 per year for vehicles is planned to keep the water/sewer equipment and fleet in reasonable condition. Most Department vehicles are ten or more years old.

Conceptual Design of Renovations to the Pershing Avenue Pump Station

The Pershing Ave station was last renovated in the early 1990s. At that time the improvements focused on mechanical and electrical improvements. The original 1885 building was not upgraded. It is necessary to conduct a study of improvements to the building to bring the facility up to current codes, repair the building envelope and modify the constant speed pumps. The modifications to the pumps will enable the water division to operate the pump station while the Brimbal Avenue Tank is being repainted and out of service. In the long term, variable speed pumps will also be more efficient. The study will be conducted in FY 2016 at a cost of \$60,000.

Upon completion of the study and conceptual design, it will be necessary to advertise a construction contract for the pump station improvements. This phase is currently projected at \$1,500,000 and would be funded from the water fund.

Paint and Repair of the Brimbal Avenue Standpipe

The standpipe is integral to the operation of the water system and has not been repainted since its construction in 1993. Recent inspections have revealed coating failures inside and outside the tank. The current paint is near the end of its useful life and we have scheduled repainting in FY2016. While the tank is empty we will be installing equipment to promote the mixing of the water which will improve the quality of the water and prevent ice formation. Cost is currently estimated at \$1,600,000.

Repaint the Folly Hill Water Tank

A soon to be completed distribution study will include recommendations on whether to retain the Folly Hill tank as a water storage tank or remain in service as an antenna support structure. In either case it will be necessary to paint the tank. The cost included here is an estimate to paint both the interior and exterior of the tank. The repainting of this tank should not be undertaken until the Brimbal Avenue tank has been repainted. This painting holds an estimated cost of \$1,200,000.

Water Meter Replacement

While it may seem like we just changed our water meters, the fact is that some are now more than 15 years old. The battery in the communication portion of the meter is guaranteed for 10 years but is expected to last a few years beyond that. It is important that we begin planning for the replacement of our meters and the current reading system. Our goal is to install a newer network of meter reading equipment that will allow us to monitor water usage in real time. Current technology will allow for immediate notification to our customers of a leak on their property. It also allows us to compare daily water usage citywide so that we may better manage this important asset. The work to identify the best system for the future and its estimated cost will be done over the coming year. We are leaving a place holder of \$4M split between water

and sewer funds for this project but recognize this is merely a placeholder and subject to change upon further study.

Sewer Pumping Station Improvements

The environment of a sewer pump station is a hostile one. Constant attention is needed to keep the stations operating efficiently. Safety codes have improved greatly since most of our stations were built. Many of our stations could benefit from a renovation project. The goal would be to make the stations reliable and safer to maintain. A total of \$150,000 annually for the next 10 years is a realistic investment in the 35 stations we operate and maintain.

Two of the sewer pump stations are due for extensive overhauls this year. Upgrades are necessary to provide adequate capacity and reliability and to eliminate inherent hazards of the stations that make maintenance work a dangerous activity. The estimated cost of upgrades is \$250,000.

Cove Area Sewer System Evaluation

The drainage system in the vicinity of Corning Street and East Lothrop was significantly improved by the Lawrence Brook drainage project. The ultimate test of this was the May 2006 rain event. During that storm the drainage system worked well and there was no significant flooding. Without the flooding waters we soon became aware of another problem. Extraneous water is entering the sanitary sewers causing them to periodically overflow. The result was basements with raw sewage flowing back into them from the street during the largest rain events.

Over the last few years, the City has worked with Dewberry Engineers Inc. to investigate the scope of the problem and recommend possible solutions. Extensive field investigations were performed and raw data was collected. The preliminary results indicate that there is a significant amount of both groundwater and surface water entering the sanitary sewers from a variety of sources.

From this study there will be several construction contracts aimed at making specific repairs to the sewer system. We already know that many manholes need to be sealed at a cost of roughly \$350,000. Many of the sewer mains are leaking badly and will need lining. At least \$1,000,000 will be required to perform this work. The authorization to proceed with this project was approved in FY14. Some of this cost will be offset by the reduction in flow being sent to the treatment plant in Salem but the most important benefit will be the protection of homes in Beverly from sewer system overflows.

**GENERAL FUND
CAPITAL EXPENDITURE PLAN
EXISTING DEBT SERVICE REQUIREMENTS BY FISCAL YEAR**

Project	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
McKeown School	Prin \$ 165,000	\$ 170,000	\$ 180,000	\$ 190,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6,659,000	Int \$ 27,213	\$ 19,663	\$ 10,913	\$ 3,206	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ayers School	Prin \$ 185,000	\$ 195,000	\$ 205,000	\$ 215,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7,340,000	Int \$ 30,956	\$ 22,381	\$ 12,381	\$ 3,628	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
School Bonds	Prin \$ 504,000	\$ 531,000	\$ 555,000	\$ 582,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19,908,000	Int \$ 84,023	\$ 60,668	\$ 33,518	\$ 9,821	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
School Planning	Prin \$ 48,000	\$ 51,000	\$ 53,000	\$ 56,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5,300,000	Int \$ 8,050	\$ 5,815	\$ 3,215	\$ 945	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Landfill Closure	Prin \$ 255,000	\$ 255,000	\$ 250,000	\$ 250,000	\$ 245,000	\$ 240,000	\$ -	\$ -	\$ -	\$ -
710,000	Int \$ 58,188	\$ 46,713	\$ 34,088	\$ 23,619	\$ 14,500	\$ 4,800	\$ -	\$ -	\$ -	\$ -
Drainage	Prin \$ 290,000	\$ 290,000	\$ 280,000	\$ 275,000	\$ 270,000	\$ 265,000	\$ 258,500	\$ -	\$ -	\$ -
5,890,000	Int \$ 61,540	\$ 51,390	\$ 42,790	\$ 35,865	\$ 26,340	\$ 15,640	\$ 5,170	\$ -	\$ -	\$ -
Centerville School	Prin \$ 670,000	\$ 690,000	\$ 715,000	\$ 730,000	\$ 760,000	\$ 790,000	\$ 820,000	\$ -	\$ -	\$ -
11,437,000	Int \$ 168,650	\$ 144,800	\$ 123,850	\$ 105,750	\$ 48,600	\$ 16,400	\$ -	\$ -	\$ -	\$ -
North Beverly School	Prin \$ 690,000	\$ 710,000	\$ 730,000	\$ 750,000	\$ 785,000	\$ 816,000	\$ -	\$ -	\$ -	\$ -
11,400,000	Int \$ 167,990	\$ 144,140	\$ 123,240	\$ 105,190	\$ 48,340	\$ 16,320	\$ -	\$ -	\$ -	\$ -
Farms Library	Prin \$ 165,000	\$ 165,000	\$ 165,000	\$ 160,000	\$ 160,000	\$ 155,000	\$ 150,000	\$ -	\$ -	\$ -
3,165,000	Int \$ 40,475	\$ 34,700	\$ 29,750	\$ 25,700	\$ 20,100	\$ 13,800	\$ 7,600	\$ 2,250	\$ -	\$ -
Fire Equipment	Prin \$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ -	\$ -
400,000	Int \$ 9,150	\$ 8,250	\$ 7,350	\$ 6,150	\$ 4,200	\$ 2,700	\$ -	\$ -	\$ -	\$ -
Carriage House	Prin \$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ -	\$ -
200,000	Int \$ 4,575	\$ 4,125	\$ 3,675	\$ 3,075	\$ 2,588	\$ 1,350	\$ 600	\$ -	\$ -	\$ -
Fire Equipment	Prin \$ 85,000	\$ 85,000	\$ 85,000	\$ 85,000	\$ 80,000	\$ 80,000	\$ 80,000	\$ 80,000	\$ -	\$ -
830,000	Int \$ 20,925	\$ 17,950	\$ 15,400	\$ 13,275	\$ 10,400	\$ 7,200	\$ 4,000	\$ 1,200	\$ -	\$ -
Drainage	Prin \$ 165,000	\$ 160,000	\$ 160,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 155,000	\$ 150,000	\$ -	\$ -
3,207,000	Int \$ 43,450	\$ 37,775	\$ 32,975	\$ 29,050	\$ 23,625	\$ 17,425	\$ 11,225	\$ 5,875	\$ 1,813	\$ -
Drainage	Prin \$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 145,000	\$ 145,000	\$ 145,000	\$ 140,000	\$ 140,000	\$ -
3,000,000	Int \$ 40,850	\$ 35,600	\$ 31,100	\$ 27,350	\$ 22,200	\$ 16,400	\$ 10,600	\$ 5,600	\$ 1,750	\$ -
BHS #1	Prin \$ 800,000	\$ 800,000	\$ 800,000	\$ 800,000	\$ 800,000	\$ 800,000	\$ 800,000	\$ 800,000	\$ 800,000	\$ 800,000
20,000,000	Int \$ 648,000	\$ 624,000	\$ 600,000	\$ 568,000	\$ 542,000	\$ 516,000	\$ 476,000	\$ 436,000	\$ 404,000	\$ -
Land acquisition	Prin \$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ -
720,000	Int \$ 20,200	\$ 19,000	\$ 17,800	\$ 16,200	\$ 14,900	\$ 13,600	\$ 11,600	\$ 9,600	\$ 8,000	\$ -
BHS #2	Prin \$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ -
10,000,000	Int \$ 304,000	\$ 294,000	\$ 282,000	\$ 270,000	\$ 258,000	\$ 246,000	\$ 232,000	\$ 216,000	\$ 200,000	\$ -
Parking Lots	Prin \$ 95,000	\$ 95,000	\$ 95,000	\$ 95,000	\$ 95,000	\$ 95,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ -
1,300,000	Int \$ 33,550	\$ 30,225	\$ 27,375	\$ 25,000	\$ 21,675	\$ 17,875	\$ 14,175	\$ 11,025	\$ 8,550	\$ -
High School	Prin \$ 104,000	\$ 105,000	\$ 105,000	\$ 105,000	\$ 105,000	\$ 105,000	\$ 105,000	\$ 105,000	\$ 105,000	\$ -
2,059,000	Int \$ 75,147	\$ 74,755	\$ 72,575	\$ 67,425	\$ 62,175	\$ 56,925	\$ 51,675	\$ 46,425	\$ 41,175	\$ -
Fiber and Communication	Prin \$ 115,000	\$ 115,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 110,000	\$ 100,000	\$ -
1,000,000	Int \$ 42,142	\$ 40,800	\$ 38,500	\$ 33,000	\$ 27,500	\$ 22,000	\$ 16,500	\$ 11,000	\$ 5,500	\$ -

**GENERAL FUND
CAPITAL EXPENDITURE PLAN
EXISTING DEBT SERVICE REQUIREMENTS BY FISCAL YEAR**

Project	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
City Hall and Police Station	Prin \$ 128,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000
2,483,000	Int \$ 90,356	\$ 89,850	\$ 87,350	\$ 81,100	\$ 74,850	\$ 68,600	\$ 62,350	\$ 56,100	\$ 49,850	\$ 43,600
Library Repairs	Prin \$ 128,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000
2,458,000	Int \$ 89,623	\$ 89,100	\$ 86,600	\$ 80,350	\$ 74,100	\$ 67,850	\$ 61,600	\$ 55,350	\$ 49,100	\$ 42,850
Fire Trucks	Prin \$ 54,000	\$ 55,000	\$ 55,000	\$ 55,000	\$ 55,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
974,000	Int \$ 35,743	\$ 35,475	\$ 34,375	\$ 31,625	\$ 28,875	\$ 26,125	\$ 23,625	\$ 21,125	\$ 18,625	\$ 16,125
TOTAL GENERAL FUND	\$ 7,365,795	\$ 7,268,174	\$ 7,158,819	\$ 7,043,324	\$ 5,857,743	\$ 5,723,480	\$ 5,344,390	\$ 3,289,350	\$ 2,908,363	\$ 2,442,200

**GENERAL FUND
CAPITAL EXPENDITURE PLAN
PROPOSED DEBT SERVICE REQUIREMENTS BY FISCAL YEAR
With Middle School @ \$53.5M**

Project	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Remaining High School	\$ -	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
2,000,000	\$ 65,025	\$ 100,000	\$ 95,000	\$ 90,000	\$ 85,000	\$ 80,000	\$ 75,000	\$ 70,000	\$ 65,000	\$ 60,000
Middle School Feasibility Study	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ 6,250	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Middle School #1	\$ -	\$ -	\$ 353,924	\$ 370,386	\$ 386,848	\$ 407,425	\$ 428,002	\$ 448,579	\$ 473,271	\$ 497,963
20,577,000	\$ -	\$ -	\$ 1,028,850	\$ 1,011,154	\$ 992,634	\$ 973,292	\$ 952,921	\$ 931,521	\$ 909,092	\$ 885,428
Middle School #2	\$ -	\$ -	\$ -	\$ 353,924	\$ 370,386	\$ 386,848	\$ 407,425	\$ 428,002	\$ 448,579	\$ 473,271
20,577,000	\$ -	\$ -	\$ -	\$ 1,028,850	\$ 1,011,154	\$ 992,634	\$ 973,292	\$ 952,921	\$ 931,521	\$ 909,092
Middle School #3	\$ -	\$ -	\$ -	\$ -	\$ 209,882	\$ 222,228	\$ 234,574	\$ 242,805	\$ 255,151	\$ 275,000
12,346,000	\$ -	\$ -	\$ -	\$ -	\$ 617,300	\$ 606,806	\$ 595,695	\$ 583,966	\$ 571,826	\$ 559,068
Public Safety Building	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 800,000	\$ 800,000	\$ 800,000
20,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000	\$ 960,000	\$ 920,000
Public Services Building	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 600,000	\$ 600,000
15,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 750,000	\$ 720,000
TOTAL GENERAL FUND	\$ 71,275.00	\$ 200,000.00	\$ 1,577,774.00	\$ 2,954,314.00	\$ 3,773,204.00	\$ 3,769,233.00	\$ 3,766,909.00	\$ 5,557,794.00	\$ 6,864,440.00	\$ 6,799,822.00

**GENERAL FUND
CAPITAL EXPENDITURE PLAN
PROPOSED DEBT SERVICE REQUIREMENTS BY FISCAL YEAR**
With Middle School @ \$69.1M

Project	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Remaining High School 2,000,000	\$ -	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Middle School Feasibility Study	\$ 65,025	\$ 100,000	\$ 95,000	\$ 90,000	\$ 85,000	\$ 80,000	\$ 75,000	\$ 70,000	\$ 65,000	\$ 60,000
Middle School #1	\$ 6,250	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Middle School #2	\$ -	\$ -	\$ 457,124	\$ 478,386	\$ 499,649	\$ 526,226	\$ 552,803	\$ 579,380	\$ 611,272	\$ 643,163
Middle School #3	\$ -	\$ -	\$ 1,328,851	\$ 1,305,995	\$ 1,282,075	\$ 1,257,093	\$ 1,230,782	\$ 1,203,142	\$ 1,174,173	\$ 1,143,609
Public Safety Building	\$ -	\$ -	\$ -	\$ 457,124	\$ 478,386	\$ 499,649	\$ 526,226	\$ 552,803	\$ 579,380	\$ 611,272
Public Services Building	\$ -	\$ -	\$ -	\$ 1,328,851	\$ 1,305,995	\$ 1,282,075	\$ 1,257,093	\$ 1,230,782	\$ 1,203,142	\$ 1,174,173
15,945,955	\$ -	\$ -	\$ -	\$ -	\$ 271,081	\$ 287,027	\$ 302,973	\$ 313,604	\$ 329,550	\$ 355,187
20,000,000	\$ -	\$ -	\$ -	\$ -	\$ 797,298	\$ 783,744	\$ 769,393	\$ 754,244	\$ 738,564	\$ 722,086
15,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 800,000	\$ 800,000
TOTAL GENERAL FUND	\$ 71,275.00	\$ 200,000.00	\$ 1,980,975.39	\$ 3,760,356.96	\$ 4,819,484.04	\$ 4,815,813.09	\$ 4,814,269.38	\$ 4,803,954.49	\$ 6,601,080.45	\$ 6,569,489.72

GENERAL FUND PROPOSED AND EXISTING DEBT SERVICE

With Middle School @ \$53.5M

	Issued	2015 Total	2016 Total	2017 Total	2018 Total	2019 Total	2020 Total	2021 Total	2022 Total	2023 Total	2024 Total	2025 Total
McKeown School	6,659,000	188,612	192,213	189,663	190,913	193,206	-	-	-	-	-	-
Ayers School	7,340,000	218,256	215,956	217,381	217,381	218,628	-	-	-	-	-	-
School Bonds	19,908,000	588,803	588,023	591,668	588,518	591,821	-	-	-	-	-	-
School Planning	5,300,000	56,950	56,050	56,815	56,215	56,945	-	-	-	-	-	-
Landfill Closure	710,000	328,487	313,188	301,713	284,088	273,619	259,500	244,800	263,670	-	-	-
Drainage	5,890,000	365,315	351,540	341,390	322,790	310,865	296,340	280,640	836,400	-	-	-
Centerville School	11,437,000	838,450	838,650	834,800	838,850	835,190	834,140	838,600	832,320	-	-	-
North Beverly School	11,400,000	837,790	837,990	834,140	833,240	835,190	834,140	833,340	162,600	-	-	-
Farms Library	3,165,000	210,425	205,475	199,700	194,750	185,700	180,100	168,800	34,200	31,200	-	-
Fire Equipment	400,000	39,750	39,150	38,250	37,350	36,150	35,175	34,200	17,100	15,600	-	-
Carriage House	200,000	19,875	19,575	19,125	18,675	18,075	17,588	17,100	16,350	15,600	-	-
Fire Equipment	830,000	108,475	105,925	102,950	100,400	98,275	90,400	87,200	84,000	81,200	-	-
Drainage	3,207,000	213,400	208,450	197,775	192,975	184,050	178,625	172,425	166,225	155,875	146,813	-
Drainage	3,000,000	200,425	190,850	185,600	181,100	177,350	167,200	161,400	155,600	145,600	141,750	-
BHS #1	20,000,000	1,464,000	1,448,000	1,424,000	1,400,000	1,368,000	1,342,000	1,316,000	1,276,000	1,236,000	1,204,000	1,172,000
Land acquisition	720,000	61,000	60,200	59,000	57,800	56,200	54,900	53,600	51,600	49,600	48,000	46,400
BHS #2	10,000,000	712,000	704,000	694,000	682,000	670,000	658,000	646,000	632,000	616,000	600,000	584,000
Parking Lots	1,300,000	131,400	128,550	125,225	122,375	112,875	116,675	112,875	104,175	101,025	98,550	96,300
High School	2,059,000	-	179,147	179,755	177,575	172,425	167,175	161,925	156,675	151,425	146,175	140,925
Fiber and Communication	1,000,000	-	157,142	155,800	148,500	143,000	137,500	132,000	126,500	121,000	105,500	-
City Hall and Police Station	2,483,000	-	218,356	214,850	212,350	206,100	199,850	193,600	187,350	181,100	174,850	168,600
Library Repairs	2,458,000	-	217,623	214,100	211,600	205,350	199,100	192,850	186,600	180,350	174,100	167,850
Fire Trucks	974,000	-	89,743	90,475	89,375	86,625	83,875	76,125	73,625	71,125	68,625	66,125
SUBTOTAL CURRENT DEBT SERVICE		6,583,413	7,365,795	7,268,174	7,158,819	7,043,324	5,857,743	5,723,480	5,344,390	3,289,350	2,908,363	2,442,200
PROPOSED DEBT SERVICE												
Short Term Borrowing	2,000,000	570,299	471,275	400,000	658,462	154,552	185,000	180,000	175,000	170,000	165,000	160,000
Remaining High School	-	-	65,025	200,000	195,000	190,000	-	-	-	-	-	-
Middle School Feasibility Study	-	-	6,250	-	-	-	-	-	-	-	-	-
Middle School #1	20,577,000	-	-	-	1,382,774	1,381,540	1,379,482	1,380,717	1,380,923	1,380,100	1,382,363	1,383,391
Middle School #2	20,577,000	-	-	-	-	1,382,774	1,381,540	1,379,482	1,380,717	1,380,923	1,380,100	1,382,363
Middle School #3	12,346,000	-	-	-	-	-	827,182	829,034	830,269	826,771	826,977	834,068
Public Safety Building	20,000,000	-	-	-	-	-	-	-	-	1,800,000	1,760,000	1,720,000
Public Services Building	15,000,000	-	-	-	-	-	-	-	-	-	1,350,000	1,320,000
SUBTOTAL PROPOSED DEBT SERVICE		570,299	542,550	600,000	2,236,236	3,108,866	3,773,204	3,769,233	3,766,909	5,557,794	6,864,440	6,799,822
TOTAL CURRENT + PROPOSED DEBT SERVICE		7,153,712	7,908,345	7,868,174	9,395,054	10,152,190	9,630,947	9,492,713	9,111,299	8,847,144	9,772,803	9,242,022
Appropriation (assumed 2.5% increase)			7,908,345	8,106,053	8,308,705	8,516,422	8,729,333	8,947,566	9,171,255	9,400,537	9,635,550	9,876,439
Sale of McKay School			900,000	-	-	-	-	-	-	-	-	-
Possible Sale of Briscoe			350,000	350,000	350,000	1,750,000	350,000	350,000	350,000	350,000	350,000	350,000
Annual required stabilization fund deposit			350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000
Stabilization Fund Balance			5,250,928	6,500,928	7,088,808	6,352,458	6,816,690	6,265,077	6,069,930	6,479,886	7,383,279	7,596,027
Balance / (Deficit)			6,500,928	7,088,808	6,352,458	6,816,690	6,265,077	6,069,930	6,479,886	7,383,279	7,596,027	8,580,444

**BEVERLY GOLF AND TENNIS FUND
CAPITAL EXPENDITURE PLAN
EXISTING DEBT SERVICE REQUIREMENTS BY FISCAL YEAR**

Project	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Veranda	35,000	35,000	35,000	35,000	35,000	35,000	31,000	30,000	-	-
306,000 10 YR	8,615	7,390	6,340	5,465	4,240	2,840	1,520	450	-	-
Building Improvements	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
500,000 20 YR	18,180	18,093	17,593	16,343	15,093	13,843	12,593	11,343	10,093	8,843
Building / Course Improvements	110,000	110,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000
1,500,000 15 YR	33,800	31,050	27,825	24,675	21,525	18,375	14,700	10,500	6,300	2,100
TOTAL EXISTING BG&T DEBT SERVICE	230,595	226,533	216,758	211,483	205,858	200,058	189,813	182,293	146,393	140,943

**WATER FUND
CAPITAL EXPENDITURE PLAN
EXISTING DEBT SERVICE REQUIREMENTS BY FISCAL YEAR**

Project	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Rte 1A Water System	48,000	48,000	47,000	47,000	-	-	-	-	-	-
437,725 9 yr	7,296	5,136	2,761	793	-	-	-	-	-	-
Water Improvements	75,000	75,000	70,000	70,000	70,000	70,000	61,500	-	-	-
641,500 10 yr	15,685	13,060	10,860	9,110	6,660	3,860	1,230	-	-	-
Water Improvements	30,000	30,000	30,000	30,000	30,000	25,000	23,000	-	-	-
258,000 10 yr	6,270	5,220	4,320	3,570	2,520	1,420	460	-	-	-
Hal & West Streets	45,000	45,000	45,000	45,000	45,000	44,000	44,000	44,000	44,000	44,000
892,060 20 yr	26,070	24,720	23,370	21,570	20,108	18,645	16,445	14,245	12,485	10,725
TOTAL EXISTING WATER DEBT SERVICE	253,321	246,136	233,311	227,043	174,288	162,925	146,635	59,245	56,485	54,725

PROPOSED DEBT SERVICE BY FISCAL YEAR

Project	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Beverly Farms Main	-	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000
2,500,000 20 yr	31,250	125,000	118,750	112,500	106,250	100,000	93,750	87,500	81,250	75,000
Standley Street Main	-	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
800,000 20 yr	-	40,000	38,000	36,000	34,000	32,000	30,000	28,000	26,000	24,000
Haskell Street Main	-	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
700,000 20 yr	-	35,000	33,250	31,500	29,750	28,000	26,250	24,500	22,750	21,000
Pershing Pump Station	-	-	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000
1,500,000 20 yr	-	-	75,000	71,250	67,500	63,750	60,000	56,250	52,500	48,750
Brimbal Ave Standpipe	-	-	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000
1,600,000 20 yr	-	-	80,000	76,000	72,000	68,000	64,000	60,000	56,000	52,000
Foly Hill Water Tank	-	-	-	60,000	60,000	60,000	60,000	60,000	60,000	60,000
1,200,000 20 yr	-	-	-	60,000	57,000	54,000	51,000	48,000	45,000	42,000
Water Meters	-	133,333	133,333	133,333	133,333	133,333	133,333	133,333	133,333	133,333
2,000,000 15 yr	-	100,000	93,333	86,667	80,000	73,333	66,667	60,000	53,333	46,667
TOTAL PROPOSED WATER DEBT SERVICE	31,250	633,333	926,667	1,022,250	994,833	967,417	940,000	912,583	885,167	857,750

COMBINED DEBT SERVICE	284,571	879,470	1,159,978	1,249,293	1,169,121	1,130,342	1,086,635	970,828	941,652	912,475
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**SEWER FUND
CAPITAL EXPENDITURE PLAN
EXISTING DEBT SERVICE REQUIREMENTS BY FISCAL YEAR**

Project	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
MWPAT	31,729	36,262	36,262	36,262	36,262	40,795	40,795	40,795	45,327	-
567,192 17 yr	15,808	13,983	11,755	9,714	8,117	6,190	4,274	2,223	-	-
MWPAT	3,798	3,875	3,953	4,033	4,115	4,198	4,283	4,369	4,458	-
64,771 17 yr	704	627	549	469	387	304	219	133	45	-
Boyles Street and Cross Lane	83,000	83,000	83,000	83,000	83,000	83,000	83,000	83,000	83,000	83,000
Hale and West Streets	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000	85,000
1,670,000 20 yr	48,769	46,219	43,669	40,269	37,506	34,744	30,494	26,244	22,844	19,444
Chubb's Brook	39,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
774,000 20 yr	28,318	28,181	27,381	23,381	23,381	21,381	19,381	17,381	15,381	13,381
Raymond Farms Drainage	85,000	85,000	85,000	85,000	85,000	81,000	81,000	81,000	81,000	81,000
1,657,940 20 yr	48,349	45,799	43,249	39,849	37,086	34,324	30,274	26,224	22,984	19,744
North Beverly Brook	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
900,000 20 yr	112,200	108,450	103,950	99,450	94,950	90,450	85,200	79,200	73,200	67,200
TOTAL EXISTING SEWER DEBT SERVICE	731,674	726,396	713,767	698,426	684,805	671,385	653,920	635,568	623,239	558,769

PROPOSED DEBT SERVICE BY FISCAL YEAR

Project	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Rantoul St. Sewer	-	67,500	67,500	67,500	67,500	67,500	67,500	67,500	67,500	67,500
1,350,000 20 yr	6,250	67,500	64,125	60,750	57,375	54,000	50,625	47,250	43,875	40,500
Cove Area Sewer	-	67,500	67,500	67,500	67,500	67,500	67,500	67,500	67,500	67,500
1,350,000 20 yr	16,875	67,500	64,125	60,750	57,375	54,000	50,625	47,250	43,875	40,500
Water Meters	-	133,333	133,333	133,333	133,333	133,333	133,333	133,333	133,333	133,333
2,000,000 15 yr	-	100,000	93,333	86,667	80,000	73,333	66,667	60,000	53,333	46,667
TOTAL PROPOSED SEWER DEBT SERVICE	1,219,681	1,689,176	1,655,282	1,616,625	1,580,326	1,540,228	1,498,047	1,454,229	1,417,244	1,328,119

COMBINED DEBT SERVICE

	1,951,355	2,415,572	2,369,049	2,315,052	2,265,132	2,211,614	2,151,966	2,089,797	2,040,483	1,886,888
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