

Burb
TO: BARBARA MCBETH
FROM: KATHY SMITH-ROY
SUBJECT: CAPITAL IMPROVEMENT PLAN (CIP)
DATE: FEBRUARY 20, 2009

MEMORANDUM

*TO: MEMBERS OF THE
PLANNING COMMISSION
FOR PUBLIC HEARING
AND ADOPTION ON
FEBRUARY 25TH*

The City of Novi prepares and includes in its annual budget a Capital Improvement Plan. In an effort to provide a comprehensive, efficient and effective plan this is done in conjunction and compliance with the Municipal Planning Commission Act (PA285).

The attached plan was prepared by City staff and revised based on comments received pursuant to meetings with the Planning Commission CIP Committee, and then the Joint CIP Committee (which includes Planning Commission members and City Council members). This plan is being presented to the Planning Commission for its adoption on February 25, 2009.

The City Manager will make recommendations for projects to be included in the 2009-10 Proposed Budget to City Council (which have not been identified to date).

Last year Planning Commission members shared some concerns regarding the placement/inclusion of roundabouts. The roundabout locations recommended in this document are supported by the City engineering staff. The strategic placement of these projects are intended to provide safe and efficient traffic flow, and will also serve as a traffic calming device.

If you have any questions, or would like any additional information, please let me know.

C: Leadership Group
Finance Department

Capital Improvements Program

City of Novi, Michigan 2009-2015

Overview

The City of Novi's Capital Improvements Program (CIP) is a planning tool, with a goal to identify and schedule capital improvements over a six-year period from 2009-2015. The CIP is an opportunity to formulate strategic long-term policy decisions that extends beyond the current 2009-2010 budget year. The CIP helps track multi-year projects that may require planning, design, land acquisition and construction. The projects identified in the CIP represent the City of Novi's plan to serve residents and anticipate the needs of a growing and dynamic community. The following documents were considered in preparation of the CIP:

- Master Plan for Land Use (adopted December 1, 2004, including amendments adopted April 16, 2008)
- Water System Master Plan Report (adopted November 24, 2008)
- Storm Water Master Plan Update (adopted February 12, 2007)
- Capacity Management Operations & Maintenance Report (March 27, 2007)
- Community Recreation Plan, including Americans with Disabilities Act Transition Plan, 2003-2008 (adopted October 20, 2003; amended July 25, 2005)
- Pathway and Sidewalk Prioritization Analysis and Process (adopted November 13, 2006)

Definition of a Capital Improvement

A capital improvement is defined as any new equipment, construction, acquisition or improvement to public lands, buildings or structures in excess of \$25,000 with a minimum life expectancy of five years. Maintenance-oriented, operational or continuous expenditures are not considered to be capital improvements.

The CIP allows for responsible and thoughtful planning of future major expenditures that are not necessarily financed or automatically included in the annual budgeting process. All capital projects, however, as they pertain to the definition of capital improvements above should be part of this CIP. Specifically, the purpose of the CIP is to:

- Identify and evaluate the needs for public facilities.
- Determine cost estimates for each capital project submitted.
- Determine if there will be future operating costs for such projects.
- Determine potential sources of funding for such projects.
- Adopt policies for implementing capital improvement construction.
- Anticipate and pre-plan projects with an emphasis on seizing opportunities for partnerships and alternative funding.

Impact of Capital Budget on the Operating Budget

As new policies and programs are approved, both the operating and capital budgets are impacted. For example, an increase in service levels approved as part of the operating budget would have long-term effects on the Capital Improvements Program. Conversely, a restrictive change to the use of long-term debt would slow capital programs.

Regardless of the difference between the operating and capital budgets, the two are interdependent. Budgetary policy states that all foreseeable operating costs related to capital projects be estimated and provided for as part of the review process associated with the Capital Improvements Program. In addition, departments are required to include costs associated with operating and maintaining capital projects that are requested for the upcoming year.

Legal Basis of the Capital Improvements Program

The Capital Improvements Program has been authorized by the Municipal Planning Commission Act (Section 9, Public Act 285 of 1931). This mandate gives responsibility for preparing a CIP to local Planning Commission bodies, and reads as follows:

"For the purpose of furthering the desirable future development of the municipality under the master plan the city planning commission, after the commission shall have adopted a master plan, shall prepare coordinated and comprehensive programs of public structures and improvements. The commission shall annually show those public structures and improvements, in the general order of their priority, which in the commissions judgment will be needed or desirable and can be undertaken within the six-year period. The above comprehensive coordinated programs shall be based upon the requirements of the community for all types of public improvements, and, to that end, each shall upon request furnish the commission with lists, plans and estimates of time and cost of public structures and improvements within the purview of such department."

Planning and Benefits of the Capital Improvements Program

The CIP is first and foremost, a planning tool. It can be quite useful as a primary guide in implementing the Master Plan. With thoughtful foresight and review as a result of a CIP, the many outstanding capital projects that communities are faced with implementing every year, can be viewed as one package, rather than as small, fragmented groups or lists, with no unified sense of focus and direction.

When capital improvements begin with careful planning and study, the City of Novi's chances for receiving state and federal grants are greatly enhanced. Some grants require the inclusion of a CIP with their application. Formulation of a CIP assists those involved to look at alternative funding mechanisms that might not have been considered before. Instead of relying on local revenue sources alone, the CIP allows the City to think more creatively to fulfill Master Plan goals and policies. The CIP often avoids reactive planning, and instead replaces it with balanced growth initiatives.

Program Funding

There are multiple methods available to local governments for financing capital improvement projects. Since capital improvements require large outlays of capital for any given project, it is often necessary to pursue multiple creative solutions for financing projects.

General Obligation (G.O.) Bonds

These types of bonds are especially useful for financing large municipal projects such as infrastructure improvements. They require voter approval and usually are used for projects that will benefit the residents of the entire community.

When the City sells G.O. Bonds, the purchaser is basically lending money to the City. The amount of the bond, plus interest is repaid through property taxes that the City, as the issuing authority, has the power to levy at the level necessary and within state guidelines to retire the debt.

A variation of the G.O. Bonds is the G.O. Limited Tax Bonds which can be repaid through tax millage. The interest rate for this type if issue is slightly higher than for the G.O. Bonds, and though voter approval is not required, a referendum period is afforded to the citizenry to challenge the proposed bond resolution.

Revenue Bonds

These bonds are generally sold as a means for constructing revenue-producing facilities such as water and sewer systems, and other such facilities that produce tolls, fees, rental charges, etc. (i.e. Novi Ice Arena, and Meadowbrook Commons). Security for and payment of revenue bonds are typically based upon the revenue-producing facility or activity rather than the economic or taxpaying base.

Federal Grants

Funding is made available to cities through Federal grants and programs. Grants are usually subject-specific, and require application by the local government for consideration. Amounts of grants vary, and are determined by the grantor through criteria-based processes. The availability of grants is usually a competitive process, so creative and effective grant writing is crucial to receiving funding for capital improvement projects.

Building Authority

The City of Novi has a Building Authority that functions as a mechanism to facilitate the selling of bonds to finance public improvements. These bonds can be used as funding for buildings and recreational uses. Though voter approval is not required, a referendum period is afforded to the citizenry to challenge the proposed bond resolution. This is the mechanism used in the construction of the ice arena and the older adult housing facility.

Enterprise Funds

Enterprise funds are typically established for services such as water, sewer, recreation, and housing. Revenues are generated primarily through user charges and connection fees from those who benefit from the improvements.

Developer Contributions

Developers as part of subdivision and site planning requirements may provide infrastructure, open space and recreational facilities. Developers may contribute a share of funds to the government entity, or install the facilities themselves as local need arises, and/or during the construction process. Once completed, the local government entity may agree to maintain the facilities.

Special Assessments

Special assessment financing allows local government to collect special taxes from owners of property directly benefiting from capital improvements. These types of improvements often include streets and sidewalks, sanitary sewer, storm drainage, and water distribution systems.

Gas and Weight Tax

The City of Novi receives a formula-rated share of motor fuel and highway usage taxes from the State of Michigan to be utilized for transportation and maintenance-related projects.

Millage

Property taxes are based upon the local millage rate. Revenue received from property taxes may be used for capital improvements as part of the General Fund, but such improvements are usually smaller scale and less expensive.

General Fund

The General Fund for the City of Novi may be used for capital improvements; however, it is not the intent of the CIP to earmark these funds for projects. Instead, smaller scale, less expensive capital projects with a high priority could be funded as line items.

State Shared Revenue

In addition to the Gas and Weight Taxes above which are shared revenue, the City receives its share of various taxes and fees from programs and requirements by the State of Michigan.

Public/Private Partnership

This type of financing has become increasingly popular in areas where creative financing is fostered. In many communities the local revenue share may not support some kinds of public improvements. In contrast, private developers may avoid taking on a project where the infrastructure cost far exceeds profitability. This method of funding brings both the public sector and private contributor together to share in the costs of a project, or a part of a project, which inevitably lessens the overall financial burden falling onto a single source.

Miscellaneous Funding

There are additional methods that are suitable for funding capital improvements. Examples of alternative funding methods are Tax Increment Financing (TIF), Impact Fees, Facility User Fees, etc. Current State legislation does not permit some of these funding methods, which have been used successfully in other states; changes in legislation could see these and other innovative methods permitted in the future.

Project Summary

The following tables include project summaries with estimated costs over the six-year period. The first column identifies an item number and the tables are followed by a numeric Project Description. Following the Project Descriptions section is the estimated future operating and maintenance costs schedule.

Project Descriptions

Roads

1.Neighborhood Rehabilitation & Repaving Program

Reconstruction of approximately 1.5 miles per year of neighborhood streets. The locations are to be determined using the Pavement Surface Evaluation and Rating (PASER) reporting system.

2.I-96 Rehabilitation/Replacement Projects

I-96/696 patch and overlay from Halstead to Novi Road, reconstruction of Novi Road Ramps, Novi/I-96 Bridge repairs, Meadowbrook/I-96 bridge repairs and I-96/CSX bridge repairs.

3.Novi Road Link, Ten Mile to Grand River Ave., RCOC Project

RCOC Project to widen Novi Road to 5 lanes, relocate utilities and provide a bridge over the CSX Railroad.

4.Cranbrooke Drive Bridge Repair

Perform repairs to the existing Cranbrooke Drive Bridge over Ingersol Creek. The 2008 bi-annual bridge inspection of the structure indicated that the structure is in fair to poor condition and recommended repairing all delaminated/spalled concrete at each abutment and existing slope protection; place additional riprap below the bridge to prevent further scour, replace the bearings, repair the beam ends, seal deck joints including removing the landscaping in the median over the bridge and placing waterproofing on the bridge deck and perform a scour analysis.

5.Beck Road Repaving/Replacement Nine Mile to Ten Mile (Paser 3-6)

Repaving of Beck Road to preserve life of roadway until reconstruction occurs in or around 2020.

6.Southwest Quadrant Ring Road Study (Flint St) Novi Road and Grand River

Study and construction of a realignment of Flint Street to provide a connection to the ring road at the northwest quadrant of Grand River Avenue and Novi Road. The study was recommended by the Ring Road Study Committee for the northwest quadrant.

7.Northwest Quadrant of Ring Road, Grand River to Novi Road

Construction of a 1,300 foot long, 4 Lane Boulevard connecting Novi Road and Grand River Ave. In the northwest quadrant of the intersection, and a 650 foot long industrial spur road. Includes a bridge over the Rouge River, repaving of Fonda and new signals at Novi Road and Grand River Avenue intersections.

8.Meadowbrook Road Repaving/Replacement Ten Mile to Cherry Hill (Paser 5)

Repair and repaving of Meadowbrook Road between 10 Mile Road and Cherry Hill Road (excluding the intersections). Includes the addition of a northbound left turn lane for the Novi Senior Center.

9.Nine Mile Road Rehabilitation/Replacement: Haggerty Road to Meadowbrook Road (Paser 4)

Pavement repairs and rehabilitation to extend the useful life of the roadway.

10.Twelve Mile Road Widening/Replacement: Beck Road and Cabaret Drive (includes bridge over CSX)

Engineering design costs for RCOC project to widen 12 Mile Road as a four lane boulevard to transition from Dixon Road to Beck Road, including construction of a bridge over the CSX Railroad.

11.West Oaks Rehabilitation/Replacement (Paser 3-4)

Repair and repave West Oaks Drive from Novi Road to Donelson Drive, including traffic safety improvements.

12.Crescent Drive, Novi Road to Town Center Drive, Concrete to Asphalt

Reconstruction/Replacement (Paser 4)

Removal of existing concrete pavement and replacement with new asphalt pavement approximately 2,400 feet on Crescent Drive and 2,300 feet on Town Center Drive.

13. Karim Blvd. Rehabilitation/Replacement (Paser 4)

Pavement repairs and rehabilitation to extend the useful life of the roadway.

14. Trans-X Drive Reconstruction/Replacement (Paser 4)

Reconstruction of existing concrete.

15. Novi Road Rehabilitation/Replacement (I-96 to Twelve Mile)

Pavement repairs, partial reconstruction and rehabilitation to extend the useful life of the roadway.

16. Nine Mile, Novi to Taft, Rehabilitation (Paser 4)

Pavement repairs, partial reconstruction and rehabilitation to extend the useful life of the roadway.

17. Meadowbrook Road Repaving/Replacement Eight Mile Road to Nine Mile (Paser 4)

Pavement repairs and rehabilitation to extend the useful life of the roadway.

18. Fountain Walk Drive Rehabilitation/Replacement (Paser 3)

Repair and repave Fountain Walk Drive from the I-96 ramp to Donelson to extend the useful life of the roadway.

19. Town Center Drive from Grand River to Eleven Mile Road Replacement (Paser 3)

Reconstruction of existing road includes street lighting replacement.

20. Eleven Mile Road, Town Center to Meadowbrook, Reconstruction/Replacement (Paser 3-4)

Reconstruction of existing roadway in concrete.

21. Heslip Drive Rehabilitation/Replacement (Paser 4)

Reconstruction of existing concrete roadway in concrete.

22. Town Center Drive Reconstruction/Replacement Crescent Blvd. to Eleven Mile (Paser 6)

Reconstruction in concrete, includes street lighting replacement.

23. Wixom Road from Ten Mile to City Limit - Replacement (Paser 6-7)

Repair, mill and overlay Wixom Road from Ten Mile to the City limits to preserve the useful life of the roadway in asphalt.

24. Nine Mile Road, Taft to Beck, Rehabilitation/Replacement (Paser 4-6)

Pavement repairs and rehabilitation to extend the useful life of the roadway.

25. Eleven Mile Road Repaving/Replacement Taft to Beck (Paser 7)

Repair and repaving of Eleven Mile Road between Taft Road and Beck Road. Includes the addition of a dedicated right turn lane for westbound Eleven Mile Road at Beck Road.

26. Meadowbrook Road Reconstruction/Replacement Nine Mile to Ten Mile (Paser 7)

Reconstruction of existing roadway from concrete to asphalt.

27. Donelson to Sheraton and West Oaks (new road construction as recommended by the Master Plan)

Proposed new road south of existing West Oaks development connecting West Oaks Drive to Donaldson and providing access to the businesses that currently have access from Sheraton Drive. The project would include changes to existing Sheraton Drive and West Oaks Drive. This project requires the

property owner's cooperation or acquisition of right-of-way.

28. Cabot Drive Extension – Thirteen Mile to Fourteen Mile – Private Funds

Private development project to construct a new north-south road connection between M-5 and Haggerty Road from current northern end of Cabot Drive to Fourteen Mile Road.

Intersections and Signalization

29. Wixom/Ten Mile Road Signal Modernization/Replacement

Modernization of existing signal at Wixom Road and Ten Mile including the addition of a left turn phase for EB Ten Mile.

30. Beck Road and Cider Mill - New Signal

Construct a new traffic signal for the intersection of Beck Road and Cider Mill.

31. Novi Road Signal Modernization/Replacement and Mast Arm Installation (I-96 to Twelve Mile)

Upgrade existing traffic signals along Novi Road between Grand River and 12 Mile Road to include decorative mast arms.

32. Old Novi and South Lake Drive – Intersection Improvements

Signal removal, 3-way stop sign installation, reconstruction of geometrics at the intersection of Old Novi Road, 13 Mile Road and South Lake. Improvements will allow safer turning movements, especially for large vehicles.

33. Thirteen Mile and Cabot Drive - New Signal

Construct a new traffic signal for 13 Mile and Cabot Drive.

34. Taft and Eleven Mile – New Roundabout

Construct a modern roundabout at the intersection of Taft Road and 11 Mile Road. The roundabout would eliminate the existing four-way stop control and act as a traffic calming measure.

35. Lewis and Haggerty - New Signal

Construct a new traffic signal for the intersection of Lewis Drive and Haggerty Road.

36. Taft and Nine Mile - New Roundabout

Construct modern roundabout at the intersection of Taft Road and 9 Mile Road. The roundabout would eliminate the existing four-way stop control and act as a traffic calming measure.

Sidewalks & Non-motorized Pathways

37. Segment #71/#140 - Ten Mile, Hampton Hill to Myrtle, north side (includes crossing of Ten Mile Road)

Construction of 825' of 5-foot wide sidewalk to fill two gaps along the north side of Ten Mile from Hampton Hill to Myrtle, including a crossing of Ten Mile at Hampton Hill.

38. Segment #141 – Ten Mile Crossing at Nilan

Construction of pedestrian ramps and associated concrete sidewalk for pedestrian crossing of Ten Mile west of Nilan Drive.

39. Segment #145 – Ten Mile Road, north side, Catherine to Myrtle

Construction of 1,150' of 5-foot wide concrete sidewalk to fill a gap along the north side of Ten Mile Road from Myrtle to Catherine Industrial Road.

40. Segment #139 – Willowbrook Drive from Guilford to Oak Tree, east side

Construction of approximately 680' of 5-foot wide concrete sidewalk along the east side of Willowbrook from Guilford to Oaktree for pedestrian access to Village Oaks Elementary.

41. Annual Sidewalk Short-Segment Connections

Complete short sections of trails/bike paths to complete existing sections.

42. Segment #79 – Meadowbrook Rd, east side, Ten Mile to Grand River

Construct 2,310' of 5-foot wide concrete sidewalk in three segments along the east side of Meadowbrook Road from Ten Mile to Grand River. Also, construction of 200' 5-foot wide concrete sidewalk to fill two gaps along the north side of Ten Mile Road from Meadowbrook Road to Haggerty Road.

43. Segment #10 – Beck Road, east side, south of Pontiac Trail

Construction of 200' of 5-foot wide concrete sidewalk along the east side of Beck Road (in front of plaza) to fill a gap in the existing sidewalk.

44. Segment #83 - Nine Mile, Meadowbrook to Haggerty, north side

Construction of 3,800' of 5-foot wide sidewalk along the north side of Nine Mile from Meadowbrook to Haggerty Road.

45. Segment #15 – Thirteen Mile Road, south side, west of Martin

Construction of 300' of 5-foot wide concrete sidewalk along the south side of Thirteen Mile, west of Martin Avenue.

46. Segment #93 – Nine Mile Road, Novi Road to Taft Road, north side

Construction of 3,200' of 5-foot wide concrete sidewalk along the north side of Nine Mile Road from Novi Road to Taft Road.

47. Segment #76 – Grand River Avenue, north side, east of Seeley

Construct 180' of 8-foot wide concrete pathway along the north side of Grand River just east of Seeley Road.

48. Segment #92 - Novi Road, Nine Mile to Ten Mile, west side

Construction of 2,800' of 5-foot wide sidewalk to fill four gaps along the west side of Novi Road from Ten Mile to Nine Mile Road.

49. Segment #62 - Ten Mile Road, Eaton to Churchill, north side

Construction of 400' of boardwalk to fill a gap along the north side of Ten Mile Road from Eaton Center to Churchill Crossing.

50. Segment #99 – Ten Mile road, south side from Wixom Road to Beck Road

Construction of 3,500' feet of 8-foot concrete pathway along the south side of Ten Mile in two segments from Wixom to Beck.

51. Segment #133 – Wixom Road Crossing north of Eleven Mile

Construction of approximately 75' feet of 8-foot concrete pathway and associated ramps to cross Wixom Road north of Eleven Mile Road.

Storm Water System

52. Thornton Creek Sediment Removal Downstream of In-Line Basin

Dredging of private in-line basin downstream of Dunbarton Basin to remove silt that collected during the construction of the Dunbarton Basin project.

53.C & O Basin Improvements/Replacement

Improve the existing regional detention basin to provide additional flood attenuation (flow rate reduction to prevent downstream flooding).

54.Cedar Springs Basin Improvements/Replacement

Improve the existing regional detention basin to provide additional attenuation and prevent future erosion by retrofitting the control structure to restrict high frequency events, installing habitat improvement structures, filling areas that have already eroded and landscaping with native buffer planting.

55.Improvements/Replacement to Civic Center Basin

Improve the existing regional detention basin to provide additional attenuation by retrofitting and/or repairing the control structure to restrict high frequency events.

56.Brookfarm Park New Stream Bank Stabilization

Stabilization of Ingersol Creek stream bank from Willowbrook to confluence with Bishop Creek.

57.Improvements/Replacement to Thornton Basin

Improve the existing regional detention basin to provide additional attenuation by retrofitting and/or repairing the control structure to restrict high frequency events.

58.Rotary Park New Stream Bank Stabilization

Stabilization of Middle Rouge River stream banks within Rotary Park.

59.Improvements/Replacement to Lexington Green Basin

Improve the existing regional detention basin to provide additional attenuation by retrofitting the control structure to restrict high frequency events.

60.Improvements/Replacement to Leavenworth Basin

Improve the existing regional detention basin to provide additional attenuation by retrofitting and/or repairing the control structure to restrict high frequency events.

61.Bishop District New Sedimentation Dredging near Eleven Mile

Project to address the sedimentation within the wetland south of Eleven Mile and west of Meadowbrook. Potential dredging to remove accumulated sediment.

Sanitary Sewer System

62.Sewer Capacity Solution

A specific project is as of yet undefined, seeking to provide a solution to the future sanitary sewer capacity needs of the City in the form of a capacity purchase from a downstream community or other alternatives.

63.Upgrades/Replacement to Park Place Sanitary Lift Station

Purchase and installation of an on-site generator for the station as well as upgrades to the existing station including; replacement of pumps, guide rails, lift chain and the float system with level sensors.

64.Upgrades/Replacement to Drakes Bay Pump Station

Purchase and installation of an on-site generator for the station as well as upgrades to the existing station, and extension of useful life through pump maintenance.

65.Rehabilitation/Replacement of Meadowbrook Glens Sanitary Sewer

Meadowbrook Glens Subdivision has experienced problems with inflow/infiltration which is compounded by the accumulation of mineral deposits inside the pipe. Rehabilitate and replace sections of sewer as identified in the recently completed monitoring study.

66.Rehabilitation/Replacement of Pipes and Structures (Area G)

Structural repairs, root intrusion repairs, repairs of defective taps and other repairs needed to remove inflow and infiltration from the system as necessary.

67.Nine Mile Sanitary Sewer Upgrade/Replacement to Increase Pipe Capacity (Meadowbrook Road)

Development and construction of a solution to address the future capacity problems in two sections of sanitary sewer along Nine Mile Road (one west of Novi Road and one east of Meadowbrook Road).

68.Rehabilitation/Replacement of Pipes and Structures (Areas B & C1)

Structural repairs, root intrusion repairs, repairs of defective taps and other repairs needed to remove inflow and infiltration from the system as necessary.

69.Rehabilitation/Replacement of Pipes and Structures (Areas C2 & C3)

Structural repairs, root intrusion repairs, repairs of defective taps and other repairs needed to remove inflow and infiltration from the system as necessary.

70.Rehabilitation/Replacement of Pipes and Structures (Areas F1 & F2)

Structural repairs, root intrusion repairs, repairs of defective taps and other repairs needed to remove inflow and infiltration from the system as necessary.

71.Nine Mile Sanitary Sewer Upgrade to Increase Pipe Capacity (Novi Road)

Development and construction of a solution to the future capacity problems in the sanitary sewer along Nine Mile Road west of Novi Road (Novi Road).

72.Upgrades/Replacement to Regency Lift Station

Purchase and installation of an on-site generator for the station.

73.Rehabilitation/Replacement of Pipes and Structures (Areas F3 & H)

Structural repairs, root intrusion repairs, repairs of defective taps and other repairs needed to remove inflow and infiltration from the system as necessary.

Water Distribution System

74.Water Supervisory Control and Data Acquisition (SCADA) System

Phase II of the SCADA implementation to include the water system. The Project will include the connection of the pressure reducing valves (PRV), booster stations and DWSD meters to the City-wide control system to allow water and sewer personnel to better monitor and manage water system operations.

75.West Park Booster Station Upgrade/Replacement

Enhance the West Park Booster Station with upgraded control to operate the station in a more efficient manner, by not pumping as often.

76.Water Storage Facility and Appurtenances

Provide storage for the purposes of reducing rates, and hedging future increases by becoming a Maximum Day Demand customer from DWSD rather than Peak Hour Demand Customer. Install ground storage tank on available property near the Walled Lake-Novu Waste Water Treatment Plant on the north side of the City near West Park Drive. The funding level included in this program is for an eight-million

gallon tank. Further analysis will be completed to determine the cost/benefit solution (size of storage facility) and the impact on water rates.

77. Water Main Replacement in Willowbrook Estates 2

The project includes replacing the aging Asbestos Cement (AC) watermain with High Density Polyethylene (HDPE) pipe. The bursting technique, recommended to be used in this project, involves replacement and then reconnecting all services and fire hydrants back to the water main. The pipe bursting technique has proven to reduce the down time associated with water main replacement and still meets all MDEQ standards for pipe installation.

78. Island Lake Booster Station Roof Replacement

The steel roof replacement would prolong the life of the building and blend into the landscape of the area.

79. Grand River Isolation Pressure Reducing Valve (PRV)

Install a PRV at Grand River Avenue just west of Lanny's Road. The PRV should allow water to flow towards the West Park Pump Station, and improve/maintain pressures to the west.

80. Island Lake Booster Station Study and Operation Upgrades/Replacement with Variable Frequency Drive (VFD)

Rehabilitate Island Lake Pump Station jockey pump motor with a VFD and revised controls and operation procedures of the station to supply a constant discharge pressure of 80 psi during low flow time periods.

81. Garfield Road, Tuscany Reserve to Nine Mile Road, New Water Main Extension

Construction of a water main along Garfield to connect the Nine Mile Road water main constructed with the water main to be constructed on Eight Mile Road.

82. Thirteen Mile Rd Pressure Reducing Valve (PRV) to Realign Pressure District

Install a PRV on Thirteen Mile Road just west of Novi Road. The PRV should maintain downstream hydraulic grade line of approximately 1,091'.

83. 12-inch Water Main along Twelve Mile Road from west of Napier to Wixom Road

Construction of a 12-inch water main along Twelve Mile Road to connect to the existing dead-end water main serving Knightsbridge Gate to the water main on Wixom Road.

84. 16-inch Water Main along Nine Mile Road, Center Street to Novi Road

Extend a 16-inch water main approximately 2,400 feet from the existing 16-inch water main on Nine Mile Road east of Center St to the east to the existing water main at Novi Road and Nine Mile Road.

85. Nine Mile Road and Connemara - Replace Pressure Reducing Valve (PRV)

Replace existing PRV from a 2-inch PRV to a larger PRV (which will be determined during project design).

86. 12-inch Water Main along Eight Mile Road, Club Lane to Turnberry

Extend a 12-inch water main approximately 1,300 feet from the existing 12-inch water main Eight Mile Road at Club Lane to the east to the existing 12-inch water main on Eight Mile Road east of Cambridge.

87. 12-inch Water Main along Fourteen Mile Road, Haverhill to Maples

Extend a 12-inch water main approximately 900 feet from the existing 12-inch water main west of Kingswood and Fourteen Mile Road to the existing 12-inch water main off of the northeast loop of Columbia Drive in Maples.

88. Cabot Drive – New 24-inch water main, MacKenzie to Fourteen Mile Road

Construction of a 24-inch water main from the existing water main at Cabot Drive and MacKenzie, north approximately 2,600' to the existing DWSD stub at Haggerty Booster Station.

89. 16-inch Water Main – Meadowbrook Road under I-96

Install approximately 2,000' of 16-inch water main along Meadowbrook Road underneath I-96 and install a Pressure Reducing Valve (PRV) on the north side of I-96. Creating a second redundant connection crossing of I-96 for a total of 3 crossings and is important because, 95% of the City's water demands are supplied through the north side master meters along the Fourteen Mile Road/Pontiac Trail Corridor.

90.Eleven Mile Road Water Main Gaps, Taft Road to Beck Road

Complete the 12-inch water main on Eleven Mile Road from Beck Road to Taft Road. The project includes a total of 4,000' of 12-inch water main.

91.Water Connection to Detroit Water & Sewer District (DWSD) at Haggerty Booster Station

Project to construct a sixth connection of the City to DWSD water supply near the Haggerty Booster Station. Project includes new meter, pressure reducing valve and connection to DWSD main.

Parks Development

92.ITC Community Sports Park Irrigation Pump House Upgrade [installation of Variable Frequency Drive (VFD) and Main Line Replacement]

Enhance the two, in-line irrigation pumps with a VFD pumping system to reduce energy costs and extend the longevity of the irrigation network.

93.Replacement Park Entryway Signs – Lakeshore Park (1), Rotary Park (2), Brookfarm Park (2), Ella Mae Power Park (1)

Replace current park entryways signage with a uniform theme/appearance so residents can locate and use park facilities easily and safely.

94.Landing Property – Development and cost to be determined (TBD) based on the outcome of the 2009 Master Planning Process

The 2008-9 Budget included funds for the development of a master plan for the Landing Property at South Lake Drive and Old Novi Road on Walled Lake. The master plan process will be utilized to determine the best use for the property and create a conceptual plan. This process will begin and be completed in 2009, upon which a 2009-10 Project/Item Description will be developed based on the outcomes.

95.Basketball (2) and Tennis Court (4) Resurfacing - ITC Sports Park & Rotary Park

Resurface 10-year old tennis and basketball courts which have cracked asphalt and heaved contours for all fields.

96.Tim Pope Play Structure Renovation

Many of the components of the play structure need to be replaced and several more are no longer compliant with the American Society for Testing and Materials Standards (ASTM) and Consumer Product Safety Commission Standards (CPSC). In addition to component replacement the structure was constructed from chromated copper arsenate (CCA) treated wood, a chemical linked to health concerns with excessive exposure. This project would remove the existing play structure, dispose of the wood and replace it with a structure of similar size and adequate accessible safety surfacing.

97.Power Park Access Road and Parking Lot Resurfacing in Asphalt

The 9,700 sq. yd. drive and parking area associated with Ella Mae Power Park is crumbled and cracked. This access is utilized annually by numerous softball players and parents parking to watch their children participate in athletic events. The parking area accommodates approximately 200 spaces and is currently utilized seasonally.

98.Power Park Baseball Field Fencing Repair (southern two diamonds)

The two original fences on ball fields located on the south end of the complex are beginning to curl

upward from the bottom. When the existing structures were installed approximately 10 years ago a bottom rail was never installed to prevent this occurrence. The addition of this rail would stretch the existing fence near its original shape and provide structural integrity for the system to last into the future.

99.Greenway Development Phase I – Design and Engineering

Plan and build a paved, greenway for recreational use along the ITC transmission corridor and eventually connect with Oakland County regional greenway system.

100.Fuerst Park Phase II – Development (lights, seating, landscaping)

This phase will add 28 additional light poles throughout the park and uplights at signage (including electricity needs). Additional seating will be incorporated by adding 8 park benches and about 80 large boulders. This phase will also include the wildflower planting that bisects the property.

101.Lakeshore Park Play Structure Replacement

Remove one of two existing structures at the back of the park. The structure would be replaced with a new accessible structure developed for children ages 2-12.

102.Rotary Park Play Structure Replacement

Remove existing structure and replace it with a new accessible structure developed for children 2-5 years of age.

103.Power Park Play Structure Replacement

Power Park currently has two structures. The older of the two is designed for children ages 2-5. This structure has exceeded its useful life. The project would remove the existing structure and replace it with a new accessible structure developed for children 2-5. The project would also replace the current engineered wood surfacing with a poured in place surface.

104.Fuerst Park Phase III – Development (trellis, grape arbor, play structure)

This phase will add a trellis and grape arbor to be incorporated into the pathway system and a play structure appropriate for family play.

105.Lakeshore Park Asphalt Paved Parking Lot and Drive (new)

Reduce maintenance costs for Lakeshore Park lots and drives by replacing gravel surfaces with asphalt.

106.ITC Community Sports Park Play Structure Replacement

Remove one of two existing structures and replace with a new accessible structure developed for children ages 2-12.

107.ITC Community Sports Park Athletic Field Lighting – 2 Soccer Fields

This project would provide electrical infrastructure to ITC Community Sports Park for the installation of soccer field lighting.

108.ITC Community Sports Park Pathway Resurfacing

The pathway system in the parks is vital to mobility between athletic surfaces, facilities and to the health and welfare of park patrons. As the park ages the infrastructure begins to degrade and maintenance is necessary to keep our infrastructure functional.

109.Power Park Pathway Resurfacing (perimeter pathways surrounding ball fields)

The pathway system in the parks is vital to mobility between athletic surfaces, facilities, and to the health and welfare of park patrons.

110.ITC Community Sports Park Athletic Field Lighting – 3 Ball Fields

Provide electrical infrastructure to ITC Community Sports Park for the installation of ball field lighting.

Other Projects

111. Exterior Wall and Soffit Repair – Civic Center

The exterior soffit is pulling away from the wall of the Civic Center Facility as a result of the expansion of water which has come in through the block façade since the facility was constructed.

112. Civic Center Carpeting Replacement (2009-10 Phase I; Community Center, Meeting Rooms A-C, Human Resources, Parks, Rec & Forestry Front Offices)

A three-phase project to replace all of the original carpeting in the Novi City Hall and Community Center.

113. Energy Management System – Civic Center

The implementation of an automated energy management system will allow staff to digitally regulate thermal zones throughout City Hall and the Community Center. An automated system can read and be programmed/controlled from remote locations allowing for energy efficient thermal regulation of our City Hall Building.

114. City Entryway Signs

City Entryway Signs would be erected at significant entrance locations throughout the community to enhance aesthetics and further increase civic pride. The following are the locations for the sign recommendations: Thirteen Mile and Haggerty Roads, Ten Mile and Haggerty Roads, Grand River Avenue and Wixom Road, Eight Mile and Beck Roads, West Park Drive and Pontiac Trail (\$78,000). Also includes wayfinding signage on the Civic Center Campus and other City facilities (\$64,000), including the Field Services Complex and Meadowbrook Commons/Senior Center (\$22,000).

115. Dialogic Mass Notification System (replacement/upgrade)

Internet based system that allows for mass notification used in evacuations, disseminating important information to the community.

116. International Safety Instrument (ISI) "Teams"® Accountability/Telemetry System (new)

Personal Alert Safety System telemetry unit that provides vital information about the status of individual firefighters on the scene, in real time. Electronically linked to a command center located outside the fire area.

117. Material Storage Domes (two new - \$16,000 each)

Domes provide overhead protection from precipitation for equipment, vehicles, and stockpiled materials (sand, gravel, topsoil, stone, salt, cold patch and emulsion stone).

118. Single-Axle Large Dump Trucks with Front Plows and Underbody Scrapers (replace #681, #680, #670, #671, #682, #683, #698, #605, #621)

Utilized for snow removal, roadside maintenance activities drain repairs and hauling material.

119. Salt Dome Roof Repair/Replacement

Repair the roof on the original salt dome (23 years old). The roof is leaking and exposing structural reinforcing bars. Metal flashing is rusted, damaged, and missing in several locations.

120. DPW Facility Critical Needs Assessment - Phase I Mechanical

Project addresses the critical needs of the DPW facility as identified by the Facility Needs Master Plan.

121. Small Dump Trucks with Plows (replace #684, #690, #691)

Truck replacement program – vehicles with estimated useful life of 15 years. Vehicles used for snow removal, roadway maintenance activities, drain repairs and hauling material.

122. Small Dump Trucks with Plows (two, new)

Utilized daily to transport materials for road maintenance, drainage activities, and snow maintenance

operations.

123. Excavator (new)

Utilized for confined space repair projects such as rear yard drainage improvements, water and sewer projects, and roadway repairs.

124. Vibratory Roller (new)

Used for asphalt finishing in small asphalt patchwork projects.

125. Portable Equipment Lift (new)

Used to lift several of the larger vehicles that our current stationary lifts are unable to hoist for maintenance and repairs.

126. Salt Spreaders (two, new, E-Poke; \$86,500 each)

Salt spreader that dispenses both liquid anti-ice and granular salt. The spreader outperforms the standard spreaders by distributing salt and liquid icing simultaneously across 3 lanes and would enhance snow removal timetables.

127. Vactor Replacement (#711)

Supports sewer cleaning program for operations maintenance program.

128. New Utility Truck

A vehicle used to transport staff, tools and equipment for water and sewer jobs. Intended to house all of the necessary parts and supplies that may be required for water main break and lift station repairs.

129. Bobcat All-Wheel Loader (new)

Utilized to transport materials in conjunction with confined space projects. Confined space areas include rear yards, storm drain easements, snow removal on bridge decks and heavily landscaped locations.

130. Ballast and Fixture T8 Lighting Installation – Civic Center

Replace all of the existing T12 ballasts and fixtures in offices and reception offices with a high light output, and enhanced energy efficient T8 ballast and light fixture. These fixtures use approximately ¼ less energy than the traditional T12 fixtures.

131. Fire Department Emergency Vehicle Replacement - (Squads 2, 3, 4)

Transporting-capable basic life support (BLS) medium duty vehicles.

132. Retrofit Fire Tower Fire Station 4

The retrofit of the Fire Training Tower would upgrade the training facility at station #4. Special gas burners would simulate real fire conditions for all trainees. The realistic training would be used for both career and paid-on-call firefighters of both rookies and veteran personnel.

133. Salt Dome (new)

Houses salt for winter road maintenance of 39 linear miles of major roadways and 123 linear miles of local roadways.

134. DPW Facility Critical Needs Assessment - Phase II Electrical

Project addresses the critical needs of the DPW facility as identified by the Facility Needs Master Plan.

135. Tandem Large Dump Trucks with Underbody Scrapers and Front Plows (replace #699, #620, #603)

Utilized year round for snow maintenance, road maintenance, drain repairs, grading gravel road shoulders, and for hauling material.

136. Street Sweeper (replace #606)

Street sweeping helps prevent leaves, dirt, miscellaneous construction materials from entering catch

basins and the storm system.

137. Single Axle Dump Truck (replace #85)

A medium duty dump truck utilized to tow trailers up to 24,000 lbs., transport materials, salt roads & parking lots, plow snow, and perform general field operations.

138. Police Headquarters Roof Replacement

Two layers of roof need to be removed and replaced. Project recommendation includes hiring architect to develop the Request for Proposal (RFP) with the specifications, in addition to the construction costs.

139. Closed Circuit Video Monitoring System for Twelve Oaks Mall

Would provide for automatic feed to the dispatch center at the Police department from 12 Oaks Mall's 100 internal and 12 external cameras. Used to monitor ongoing situations and relay information from dispatchers to Officers.

140. Fire Station 1 - Additions/Alterations

Update Fire Station 1 according to architect's evaluation. Include slip-resistant flooring, locker/toilet/shower and storage rooms, meeting/workout rooms, kitchen and commercial appliances, day room, entry security upgrades and ADA & MIOSHA improvements.

141. Gradall Ditching Machine (replace #675)

Used for reshaping and digging ditch lines, large concrete repairs, and storm drain repairs. Also used by the Water & Sewer department for repairs.

142. Closed Circuit Video Monitoring System for Main and Market Streets

This project would provide for the installation of 4 strategically placed cameras in the Main and Market commercial areas existing landscape. The cameras would be linked with an automatic feed to the dispatch center at the Police department.

143. Fire Station 3 (new)

The current facility was built in 1978 and the site is not adequate for a new station, pursuant to the architectural study. The first year would include conducting a study for future site locations and appraisals of current site.

144. Front-end Loader (replace #689)

Loader is utilized daily for loading dirt, debris, road salt, and to unload gravel train deliveries. It is also used for snow removal on the Beck Road Interchange.

145. Civic Center Roof Replacement

This project replaces the original roofing stone and membrane over the City Hall and Community Center. The existing roofing material is approximately 20 years old. The new roof will be a similar flat roofing system that utilizes rubber and plastic composites to form a water tight seal over the entire complex. The new roof would be topped with stone to depreciate heat and protect the surface from abrasive materials, ice and snow. The new system will carry a 15 year warranty.

146. Civic Center Boiler Replacement

The existing boiler in City Hall is over 20 years old and is serviced regularly. The unit can be replaced with two smaller energy efficient units requiring minimal maintenance and saving up to 20% off existing energy costs. New boilers and circulation pumps will be synchronized to work in unison with the modernized chiller that was replaced in 2007.

147. Fire Engine 3 (replace)

The replacement fire engine would include the cost of a replacement hose, hand tools, and various portable and loose equipment.

148. Police Headquarters Building Renovation and Expansion

Per the assessment conducted in 2006 regarding the future needs of the Police department an additional 11,442 square feet may be necessary. The renovation space includes space for prisoner receiving sally port, expanded evidence storage, offices, and locker rooms, training room, emergency operation center as well as related mechanical and technology needs.

149. Single-Axle Large Dump Truck with Front Plow and Underbody Scraper (new)

Utilized for Snow Removal, roadside maintenance activities drain repairs and hauling material.

150. Grader (replace #612)

Grader is used for snow removal, maintaining road shoulders, cutting and leveling road surfaces for asphalt and concrete repairs.

Roads

	Project#	2009-10 Proposed	2010-11 Proposed	2011-12 Proposed	2012-13 Proposed	2013-14 Proposed	2014-15 Proposed	Total	Funding Source
1	Neighborhood Rehabilitation & Repaving Program	092-01	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000	\$9,600,000	City Road Funds
2	I-96 Rehabilitation/Replacement Projects*	099-10	\$37,625,000	\$0	\$0	\$0	\$0	\$37,625,000	Federal, State and City Road Funds \$432,400
3	Novi Road Link, Ten Mile to Grand River Ave., RCOE Project*	089-03	\$31,958,000	\$0	\$0	\$0	\$0	\$31,958,000	Municipal St Fund \$3,403,200; RCOE \$3,403,200; Federal \$25,151,600
4	Cranbrooke Drive Bridge Repair	097-01	\$296,000	\$0	\$0	\$0	\$0	\$296,000	Municipal St Fund
5	Beck Road Repaving/Replacement: Nine Mile to Ten Mile (Paser 3-6)	082-22	\$510,000	\$0	\$0	\$0	\$0	\$510,000	Major St Fund
6	Southwest Quadrant Ring Road Study (Flint St) Novi Road and Grand River	082-26	\$55,000	\$0	\$0	\$0	\$1,750,000	\$1,805,000	Municipal St Fund
7	Northwest Quadrant of Ring Road, Grand River to Novi Road	082-03	\$300,000	\$3,600,000	\$0	\$0	\$0	\$3,900,000	Municipal St Fund
8	Meadowbrook Road Repaving/Replacement Ten Mile To Cherry Hill (Paser 5)	082-28	\$0	\$298,000	\$0	\$0	\$0	\$298,000	Major St Fund
9	Nine Mile Road Rehabilitation/Replacement: Haggerty Road to Meadowbrook Road (Paser 4)*	082-13	\$0	\$36,000	\$516,250	\$0	\$0	\$552,250	Major St Fund, Federal STPU Grant \$169,848
10	Twelve Mile Road Widening/Replacement: Beck Road and Cabaret Drive (includes bridge over CSX)* <i>Design Only</i>	089-21	\$0	\$0	\$1,653,000	\$0	\$0	\$1,653,000	Federal \$1,322,000, Municipal \$165,500, RCOE \$165,500
11	West Oaks Rehabilitation/Replacement (Paser 3-4)	092-20	\$0	\$0	\$290,000	\$0	\$0	\$290,000	City Road Funds
12	Crescent Drive, Novi Road to Town Center Drive, Concrete to Asphalt Reconstruction/Replacement (Paser 4)	082-10	\$0	\$0	\$1,327,000	\$0	\$0	\$1,327,000	City Road Funds
13	Karim Blvd, Rehabilitation/Replacement (Paser 4)	082-18	\$0	\$0	\$166,000	\$0	\$0	\$166,000	City Road Funds
14	Trans-X Drive Reconstruction/Replacement (Paser 4)	082-16	\$0	\$0	\$886,000	\$0	\$0	\$886,000	City Road Funds
15	Novi Road Rehabilitation/Replacement (I-96 to Twelve Mile)*	099-11	\$0	\$0	\$0	\$827,000	\$0	\$827,000	Federal \$662,000, RCOE \$82,500, Municipal \$82,500
16	Nine Mile, Novi to Taft, Rehabilitation (Paser 4)*	082-20	\$0	\$0	\$0	\$484,000	\$0	\$484,000	Major Street Fund; Federal STPU Grant \$163,798
17	Meadowbrook Road Repaving/Replacement Eight Mile to Nine Mile (Paser 4)*	082-21	\$0	\$0	\$0	\$568,000	\$0	\$568,000	City Road Funds; Federal STPU grant \$169,894
18	Fountain Walk Drive Rehabilitation/Replacement (Paser 3)	092-21	\$0	\$0	\$0	\$205,000	\$0	\$205,000	City Road Funds
19	Town Center Drive from Grand River to Eleven Mile Road Replacement (Paser 3)	092-10	\$0	\$0	\$0	\$298,900	\$0	\$298,900	City Road Funds; SAD Fund
20	Eleven Mile Road, Town Center to Meadowbrook, Reconstruction/Replacement (Paser 3-4)	082-12	\$0	\$0	\$0	\$975,000	\$0	\$975,000	City Road Funds
21	Heslip Drive Rehabilitation/Replacement (Paser 4)	082-25	\$0	\$0	\$0	\$728,000	\$0	\$728,000	City Road Funds
22	Town Center Drive Reconstruction/ Replacement Crescent Blvd. to Eleven Mile (Paser 6)	082-11	\$0	\$0	\$0	\$0	\$768,600	\$768,600	City Road Funds
23	Wixom Road from Ten Mile to City Limit - Replacement (Paser 6-7)	092-22	\$0	\$0	\$0	\$0	\$995,000	\$995,000	Major St Fund/Potential Grant
24	Nine Mile Road, Taft to Beck, Rehabilitation/Replacement (Paser 4-6)	082-23	\$0	\$0	\$0	\$0	\$391,000	\$391,000	City Road Funds
25	Eleven Mile Road Repaving/Replacement Taft to Beck (Paser 7)	082-30	\$0	\$0	\$0	\$0	\$535,000	\$535,000	Major St Fund/Potential Grant
26	Meadowbrook Road Reconstruction/Replacement Nine Mile to Ten Mile (Paser 7)	082-29	\$0	\$0	\$0	\$0	\$1,150,000	\$1,150,000	Major St Fund/Potential Grant
27	Donelson to Sheraton and West Oaks (new road construction, as recommended in Master Plan)	082-32	\$0	\$0	\$0	\$0	\$805,000	\$805,000	City Road Funds/Possible EDC Grant/Private Partnership
28	Cabot Drive Extension (new) - Thirteen Mile to Fourteen Mile-Private Funds	089-11	\$0	\$0	\$0	\$0	\$1,900,000	\$1,900,000	Private Funds
	Roads Total		\$72,344,000	\$5,534,000	\$6,438,250	\$5,685,900	\$3,363,600	\$8,131,000	\$101,496,750

* Projects with previous commitment, grant, or the immediate and/or pre-programmed nature of the item.

Intersections & Signalization

	Project#	2009-10 Proposed	2010-11 Proposed	2011-12 Proposed	2012-13 Proposed	2013-14 Proposed	2014-15 Proposed	Total	Funding Source
29	Wixom/Ten Mile Road Signal Modernization/Replacement*	099-01	\$110,000	\$0	\$0	\$0	\$0	\$110,000	RCOC \$55,000, Municipal St Fund \$55,000
30	Beck Road and Cider Mill - New signal	086-01	\$210,000	\$0	\$0	\$0	\$0	\$210,000	City Road Funds
31	Novi Road Signal Modernization/Replacement and Mast Arm Installation (I-96 to Twelve Mile)	089-89	\$100,000	\$400,000	\$0	\$0	\$0	\$500,000	RCOC; Municipal St Fund
32	Old Novi and South Lake Drive - Intersection improvements	086-09	\$0	\$152,000	\$0	\$0	\$0	\$152,000	City Road Funds
33	Thirteen Mile and Cabot Drive - New Signal	086-06	\$0	\$210,000	\$0	\$0	\$0	\$210,000	Public/Private Partnership
34	Taft and Eleven Mile - New Roundabout	086-10	\$0	\$0	\$550,000	\$0	\$0	\$550,000	City Road Funds; Potential Federal Grant
35	Lewis and Haggerty - New Signal	086-07	\$0	\$0	\$0	\$0	\$210,000	\$210,000	Public/Private Partnership
36	Taft and Nine Mile - New Roundabout	086-08	\$0	\$0	\$0	\$0	\$482,000	\$482,000	City Road Funds/Potential Federal Grant
Intersections and Signalization Total			\$420,000	\$782,000	\$550,000	\$0	\$210,000	\$482,000	\$2,424,000

Sidewalks & Non-motorized Pathways

	Project#	2009-10 Proposed	2010-11 Proposed	2011-12 Proposed	2012-13 Proposed	2013-14 Proposed	2014-15 Proposed	Total	Funding Source
37	Segment #71/#140 - Ten Mile, Hampton Hill to Myrtle, north side (includes crossing of Ten Mile Road)	085-71	\$55,000	\$0	\$0	\$0	\$0	\$55,000	Municipal Street Fund
38	Segment #141 - Ten Mile Crossing at Nilan	095-141	\$17,000	\$0	\$0	\$0	\$0	\$17,000	Municipal Street Fund
39	Segment #145 - Ten Mile, north side, Catherine-Myrtle	085-145	\$125,000	\$0	\$0	\$0	\$0	\$125,000	Municipal Street Fund
40	Segment #139 - Willowbrook Drive from Guilford to Oak Tree, east side	095-139	\$62,500	\$0	\$0	\$0	\$0	\$62,500	Municipal Street Fund
41	Annual Sidewalk Short-Segment Connections	N/A	included above	\$25,000	\$25,000	\$25,000	\$25,000	\$100,000	Municipal Street Fund
42	Segment #79 - Meadowbrook Rd, east side, Ten Mile to Grand River	095-79	\$0	\$275,200	\$0	\$0	\$0	\$275,200	Municipal Street Fund
43	Segment #10 - Beck Road, east side, south of Pontiac Trail	095-10	\$0	\$25,000	\$0	\$0	\$0	\$25,000	Municipal Street Fund
44	Segment #83 - Nine Mile, Meadowbrook to Haggerty, north side	085-83	\$0	\$0	\$249,000	\$0	\$0	\$249,000	Municipal Street Fund
45	Segment #15 - Thirteen Mile Road, south side, west of Martin	095-15	\$0	\$0	\$25,000	\$0	\$0	\$25,000	Municipal Street Fund
46	Segment #93 - Nine Mile, Novi to Taft, north side	095-93	\$0	\$0	\$0	\$247,000	\$0	\$247,000	Municipal Street Fund
47	Segment #76 - Grand River, north side, east of Seeley	095-76	\$0	\$0	\$0	\$25,000	\$0	\$25,000	Municipal Street Fund
48	Segment #92 - Novi Road, Nine Mile to Ten Mile, west side	085-92	\$0	\$0	\$0	\$0	\$240,000	\$240,000	Municipal Street Fund
49	Segment #62 - Ten Mile, Eaton to Churchill, north side	085-62	\$0	\$0	\$0	\$0	\$105,000	\$105,000	Municipal Street Fund
50	Segment #99 - Ten Mile, south side from Wixom to Beck	095-99	\$0	\$0	\$0	\$0	\$381,900	\$381,900	Municipal Street Fund
51	Segment #133 - Wixom Road Crossing north of Eleven Mile	095-133	\$0	\$0	\$0	\$0	\$25,000	\$25,000	Municipal Street Fund
Sidewalks & Non-motorized Pathways Total			\$259,500	\$325,200	\$299,000	\$297,000	\$265,000	\$511,900	\$1,957,600

* Projects with previous commitment, grant, or the immediate and/or pre-programmed nature of the item.

Storm Water System

	Project#	2009-10 Proposed	2010-11 Proposed	2011-12 Proposed	2012-13 Proposed	2013-14 Proposed	2014-15 Proposed	Total	Funding Source
52	Thornton Creek Sediment Removal Downstream of In-Line Basin	093-12	\$75,000	\$0	\$0	\$0	\$0	\$75,000	Drain Revenue Fund
53	C & O Basin Improvements/Replacement	083-02	\$289,082	\$0	\$0	\$0	\$0	\$289,082	Drain Revenue Fund
54	Cedar Springs Basin Improvements/Replacement	083-03	\$96,860	\$0	\$0	\$0	\$0	\$96,860	Drain Fund; Grant (potential)
55	Improvements/Replacement to Civic Center Basin	093-20	\$0	\$154,860	\$0	\$0	\$0	\$154,860	Drain Fund; Grant (potential)
56	Brookfarm Park New Stream Bank Stabilization	093-05	\$0	\$0	\$160,950	\$0	\$0	\$160,950	Drain Revenue Fund
57	Improvements/Replacement to Thornton Basin	093-21	\$0	\$0	\$0	\$139,000	\$0	\$139,000	Drain Fund; Grant (potential)
58	Rotary Park New Stream Bank Stabilization	093-10	\$0	\$0	\$0	\$160,000	\$0	\$160,000	Drain Revenue Fund
59	Improvements/Replacement to Lexington Green Basin	083-04	\$0	\$0	\$0	\$28,000	\$0	\$28,000	Drain Fund; Grant (potential)
60	Improvements/Replacement to Leavenworth Basin	093-22	\$0	\$0	\$0	\$90,000	\$0	\$90,000	Drain Fund; Grant (potential)
61	Bishop District New Sedimentation Dredging near Eleven Mile	093-11	\$0	\$0	\$0	\$0	\$160,000	\$160,000	Drain Revenue Fund
Storm Water System Total			\$460,942	\$154,860	\$160,950	\$299,000	\$118,000	\$1,353,752	

Sanitary Sewer System

	Project#	2009-10 Proposed	2010-11 Proposed	2011-12 Proposed	2012-13 Proposed	2013-14 Proposed	2014-15 Proposed	Total	Funding Source
62	Sewer Capacity Solution	081-02	\$5,000,000	\$0	\$0	\$0	\$0	\$5,000,000	Water & Sewer Fund
63	Upgrades/Replacement to Park Place Sanitary Lift Station	081-14	\$147,000	\$0	\$0	\$0	\$0	\$147,000	Water & Sewer Fund
64	Upgrades/Replacement to Drakes Bay Pump Station	081-17	\$130,000	\$0	\$0	\$0	\$0	\$130,000	Water & Sewer Fund
65	Rehabilitation/Replacement of Meadowbrook Glens Sanitary Sewer	091-65	\$320,000	\$0	\$0	\$0	\$0	\$320,000	Water & Sewer Fund
66	Rehabilitation/Replacement of Pipes and Structures (Area G)	091-63	\$0	\$250,000	\$0	\$0	\$0	\$250,000	Water & Sewer Fund
67	Nine Mile Sanitary Sewer Upgrade to Increase Pipe Capacity (Meadowbrook Road)	091-71	\$0	\$200,000	\$0	\$0	\$0	\$200,000	Water & Sewer Fund
68	Rehabilitation/Replacement of Pipes and Structures (Areas B & C1)	091-61	\$0	\$0	\$250,000	\$0	\$0	\$250,000	Water & Sewer Fund
69	Rehabilitation/Replacement of Pipes and Structures (Areas C2 & C3)	091-62	\$0	\$0	\$0	\$250,000	\$0	\$250,000	Water & Sewer Fund
70	Rehabilitation/Replacement of Pipes and Structures (Areas F1 & F2)	091-64	\$0	\$0	\$0	\$250,000	\$0	\$250,000	Water & Sewer Fund
71	Nine Mile Sanitary Sewer Upgrade to Increase Pipe Capacity (Novi Road)	091-70	\$0	\$0	\$0	\$0	\$350,000	\$350,000	Water & Sewer Fund
72	Upgrades/Replacement to Regency Lift Station	091-77	\$0	\$0	\$0	\$0	\$154,000	\$154,000	Water & Sewer Fund
73	Rehabilitation/Replacement of Pipes and Structures (Areas F3 & H)	091-60	\$0	\$0	\$0	\$0	\$250,000	\$250,000	Water & Sewer Fund
Sanitary Sewer System Total			\$5,597,000	\$450,000	\$250,000	\$250,000	\$754,000	\$7,551,000	

NOTE: See attached map for rehabilitation and replacement location areas.

Water Distribution System

	Project#	2009-10 Proposed	2010-11 Proposed	2011-12 Proposed	2012-13 Proposed	2013-14 Proposed	2014-15 Proposed	Total	Funding Source	
74	Water Supervisory Control and Data Acquisition (SCADA) System	091-05	\$300,000	\$0	\$0	\$0	\$0	\$300,000	Water & Sewer Fund	
75	West Park Booster Station Upgrade/Replacement	091-02	\$65,000	\$0	\$0	\$0	\$0	\$65,000	Water & Sewer Fund	
76	Water Storage Facility and Appurtenances	091-09	\$100,000	\$500,000	\$21,023,000	\$220,000	\$229,900	\$240,300	\$22,313,200	Water & Sewer Fund
77	Watermain Replacement in Willowbrook Estates 2		\$1,600,000	\$0	\$0	\$0	\$0	\$1,600,000	Water & Sewer Fund	
78	Island Lake Booster Station Roof Replacement		\$40,000	\$0	\$0	\$0	\$0	\$40,000	Water & Sewer Fund	
79	Grand River Isolation Pressure Reducing Valve (PRV)	091-07	\$0	\$351,000	\$0	\$0	\$0	\$351,000	Water & Sewer Fund	
80	Island Lake Booster Station Study and Operation Upgrades/Replacement with Variable Frequency Drive (VFD)	091-04	\$0	\$180,000	\$0	\$0	\$0	\$180,000	Water & Sewer Fund	
81	Garfield Road, Tuscany Reserve to Nine Mile, New Water Main Extension	091-24	\$0	\$0	\$599,000	\$0	\$0	\$599,000	Water & Sewer Fund	
82	Thirteen Mile Rd Pressure Reducing Valve (PRV) to Realign Pressure District	091-06	\$0	\$0	\$351,000	\$0	\$0	\$351,000	Water & Sewer Fund	
83	12-inch Water Main along Twelve Mile from west of Napier to Wixom	091-13	\$0	\$0	\$991,000	\$0	\$0	\$991,000	Water & Sewer Fund	
84	16-inch Water Main along Nine Mile Rd, Center St to Novi Rd	091-25	\$0	\$0	\$0	\$499,000	\$0	\$499,000	Water & Sewer Fund	
85	Nine Mile and Connemara - Replace Pressure Reducing Valve (PRV)	091-08	\$0	\$0	\$0	\$351,000	\$0	\$351,000	Water & Sewer Fund	
86	12-inch Water Main along Eight Mile, Club Lane to Turnberry	091-23	\$0	\$0	\$0	\$0	\$203,000	\$203,000	Water & Sewer Fund	
87	12-inch Water Main along Fourteen Mile, Haverhill to Maples	091-26	\$0	\$0	\$0	\$0	\$140,000	\$140,000	Water & Sewer Fund	
88	Cabot Dr - New 24-inch Water Main, MacKenzie to Fourteen Mile	091-10	\$0	\$0	\$0	\$0	\$0	\$710,000	\$710,000	Water & Sewer Fund
89	16-inch Water Main Meadowbrook under I-96	091-01	\$0	\$0	\$0	\$0	\$0	\$1,044,000	\$1,044,000	Water & Sewer Fund
90	Eleven Mile Water Main Gaps, Taft to Beck	091-19	\$0	\$0	\$0	\$0	\$0	\$474,500	\$474,500	Water & Sewer Fund
91	Water Connection to Detroit Water and Sewer District (DWSD) at Haggerty Booster Station	091-11	\$0	\$0	\$0	\$0	\$0	\$832,000	\$832,000	Water & Sewer Fund
Water Distribution System Total			\$2,105,000	\$1,031,000	\$22,964,000	\$1,070,000	\$572,900	\$3,300,800	\$31,043,700	

Parks

		2009-10 Proposed	2010-11 Proposed	2011-12 Proposed	2012-13 Proposed	2013-14 Proposed	2014-15 Proposed	Total	Funding Source
92	ITC Community Sports Park Irrigation Pump House Upgrade (installation of Variable Frequency Drive (VFD) and Main Line Replacement)	\$50,536	\$0	\$0	\$0	\$0	\$0	\$50,536	Parks, Rec & Forestry Fund
93	Replacement Park Entryway Signs - Lakeshore Park (1), Rotary Park (2), Brookfarm Park (2), Ella Mae Power Park (1)	\$33,486	\$0	\$0	\$0	\$0	\$0	\$33,486	Parks, Rec & Forestry Fund
94	Landing Property - Development and cost TBD by the outcome of the 2009 Master Planning Process	TBD	\$0	\$0	\$0	\$0	\$0	TBD	Parks, Rec & Forestry Fund
95	Basketball (2) and Tennis Court (4) Resurfacing - ITC Sports Park & Rotary	\$0	\$25,000	\$0	\$0	\$0	\$0	\$25,000	Parks, Rec & Forestry Fund
96	Tim Pope Play Structure Renovation	\$0	\$294,781	\$0	\$0	\$0	\$0	\$294,781	Parks, Rec & Forestry Fund
97	Power Park Access Road and Parking Lot Resurfacing in Asphalt	\$0	\$185,000	\$0	\$0	\$0	\$0	\$185,000	Parks, Rec & Forestry Fund, Municipal St
98	Power Park Baseball Field Fencing Repair (southern two diamonds)	\$0	\$0	\$26,000	\$0	\$0	\$0	\$26,000	Parks, Rec & Forestry Fund
99	Greenway Development Phase I - Design and Engineering	\$0	\$0	\$100,000	\$275,000	\$275,000	\$275,000	\$925,000	Parks, Rec & Forestry Fund & Grants to be submitted (ISTEA & MNRTF)
100	Fuerst Park Phase II - Development (lights, seating, landscaping)	\$0	\$0	\$275,000	\$0	\$0	\$0	\$275,000	Parks, Rec & Forestry Fund
101	Lakeshore Park Play Structure Replacement	\$0	\$0	\$0	\$75,000	\$0	\$0	\$75,000	Parks, Rec & Forestry Fund; Grant (potential)
102	Rotary Park Play Structure Replacement	\$0	\$0	\$0	\$75,000	\$0	\$0	\$75,000	Parks, Rec & Forestry Fund; Grant (potential)
103	Power Park Play Structure Replacement	\$0	\$0	\$0	\$75,000	\$0	\$0	\$75,000	Parks, Rec & Forestry Fund; Grant (potential)
104	Fuerst Park Phase III - Development (trellis, grape arbor, play structure)	\$0	\$0	\$0	\$0	\$220,000	\$0	\$220,000	Parks, Rec & Forestry Fund
105	Lakeshore Park Asphalt Paved Parking Lot and Drive (new)	\$0	\$0	\$0	\$0	\$100,000	\$0	\$100,000	Parks, Rec & Forestry Fund, Municipal St
106	ITC Community Sports Park Play Structure Replacement	\$0	\$0	\$0	\$0	\$75,000	\$0	\$75,000	Parks, Rec & Forestry Fund, Grant (potential)
107	ITC Community Sports Park Athletic Field Lighting - 2 Soccer Fields	\$0	\$0	\$0	\$0	\$500,000	\$0	\$500,000	Parks, Rec & Forestry Fund
108	ITC Community Sports Park Pathway Resurfacing	\$0	\$0	\$0	\$0	\$0	\$100,000	\$100,000	Parks, Rec & Forestry Fund
109	Power Park Pathway Resurfacing (perimeter pathways surrounding ball fields)	\$0	\$0	\$0	\$0	\$0	\$100,000	\$100,000	Parks, Rec & Forestry Fund, Municipal St
110	ITC Community Sports Park Athletic Field Lighting - 3 Ball Fields	\$0	\$0	\$0	\$0	\$0	\$250,000	\$250,000	Parks, Rec & Forestry Fund
	Park Development Total	\$84,022	\$504,781	\$401,000	\$500,000	\$1,170,000	\$725,000	\$3,384,803	

Other Projects

		Dept.	2009-10 Proposed	2010-11 Proposed	2011-12 Proposed	2012-13 Proposed	2013-14 Proposed	2014-15 Proposed	Total	Funding Source
111	Exterior Wall and Soffit Repair - Civic Center	B&G	\$90,000	\$0	\$0	\$0	\$0	\$0	\$90,000	General Fund
112	Civic Center Carpeting Replacement (2009-10 Phase I Community Center Meeting Rooms A-C, Human Resources, Parks, Recreation and Forestry Front Offices)	B&G	\$40,000	\$40,000	\$75,000	\$0	\$0	\$0	\$155,000	General Fund
113	Energy Management System - Civic Center	B&G	\$130,000	\$0	\$0	\$0	\$0	\$0	\$130,000	General Fund
114	City Entryway Signs	B&G	\$154,000	\$0	\$0	\$0	\$0	\$0	\$154,000	General Fund
115	Dialogic Mass Notification System (replacement/upgrade)	PD	\$101,300	\$0	\$0	\$0	\$0	\$0	\$101,300	General Fund
116	International Safety Instrument (ISI) Teams® Accountability/Telemetry System (new)	FIRE	\$49,180	\$0	\$0	\$0	\$0	\$0	\$49,180	General Fund
117	Material Storage Domes (two new \$16,000 each)	DPS	\$32,000	\$0	\$0	\$0	\$0	\$0	\$32,000	General Fund
118	Single-Axle Large Dump Trucks with Front Plows and Underbody Scrapers (replace #681, #680, #670, #671, #682, #683, #698, #605, #621)	DPS	\$378,000	\$0	\$426,300	\$453,200	\$243,100	\$510,300	\$2,010,900	General Fund/Allocation
119	Salt Dome Roof Repair/Replacement	DPS	\$40,000	\$0	\$0	\$0	\$0	\$0	\$40,000	General Fund
120	DPW Facility Critical Needs Assessment - Phase I Mechanical	DPS	\$202,700	\$0	\$0	\$0	\$0	\$0	\$202,700	General Fund
121	Small Dump Trucks with Plows (replace #684, #690, #691)	DPS	\$60,000	\$0	\$71,800	\$0	\$81,300	\$0	\$213,100	General Fund/Allocation
122	Small Dump Trucks with Plows (two, new)	DPS	\$60,000	\$0	\$0	\$71,600	\$0	\$0	\$131,600	General Fund/Allocation
123	Excavator (new)	DPS	\$82,000	\$0	\$0	\$0	\$0	\$0	\$82,000	General Fund/Allocation
124	Vibratory Roller (new)	DPS	\$38,000	\$0	\$0	\$0	\$0	\$0	\$38,000	General Fund/Allocation
125	Portable Equipment Lift (new)	DPS	\$38,000	\$0	\$0	\$0	\$0	\$0	\$38,000	General Fund/Allocation
126	Salt Spreaders (two new E-Poke - \$86,500 each)	DPS	\$173,000	\$0	\$0	\$0	\$0	\$0	\$173,000	General Fund/Allocation
127	Bobcat All Wheel Loader (new)	DPS	\$43,000	\$0	\$0	\$0	\$0	\$0	\$43,000	General Fund/Allocation
128	Vactor Replacement (#711)	W&S	\$325,000	\$0	\$0	\$0	\$0	\$0	\$325,000	Water & Sewer Fund
129	New Utility Truck	W&S	\$155,000	\$0	\$0	\$0	\$0	\$0	\$155,000	Water & Sewer Fund
130	Ballast and Fixture T8 Lighting Installation -Civic Center	B&G	\$0	\$75,000	\$0	\$0	\$0	\$0	\$75,000	General Fund
131	Fire Department Emergency Vehicle Replacement - (Squads 2, 3, 4)	FIRE	\$0	\$464,600	\$0	\$0	\$0	\$0	\$464,600	Police & Fire Fund
132	Retrofit Fire Tower Fire Station 4	FIRE	\$0	\$84,400	\$0	\$0	\$0	\$0	\$84,400	General Fund
133	Salt dome (new)	DPS	\$0	\$235,000	\$0	\$0	\$0	\$0	\$235,000	General Fund
134	DPW Facility Critical Needs Assessment Phase II Electrical	DPS	\$0	\$224,000	\$0	\$0	\$0	\$0	\$224,000	General Fund
135	Tandem Large Dump Trucks with Underbody Scapers and Front Plows (replace #699, #620, #603)	DPS	\$0	\$220,000	\$0	\$232,000	\$238,000	\$0	\$690,000	General Fund
136	Street Sweeper (replace #606)	DPS	\$0	\$189,000	\$0	\$0	\$0	\$0	\$189,000	General Fund/Allocation
137	Single Axle Dump Truck (replace #85)	DPS	\$0	\$60,000	\$0	\$0	\$0	\$0	\$60,000	Parks, Rec & Forestry
138	Police Headquarters Roof Replacement	PD	\$0	\$0	\$201,900	\$0	\$0	\$0	\$201,900	General Fund
139	Closed Circuit Video Monitoring System for Twelve Oaks Mall	PD	\$0	\$0	\$51,400	\$0	\$0	\$0	\$51,400	General Fund
140	Fire Station 1-Addition/Alterations	FIRE	\$0	\$0	\$2,818,800	\$0	\$0	\$0	\$2,818,800	General Fund
141	Gradall Ditching Machine (replace #675)	DPS	\$0	\$0	\$300,000	\$0	\$0	\$0	\$300,000	General Fund/Allocation

Other Projects (continued)

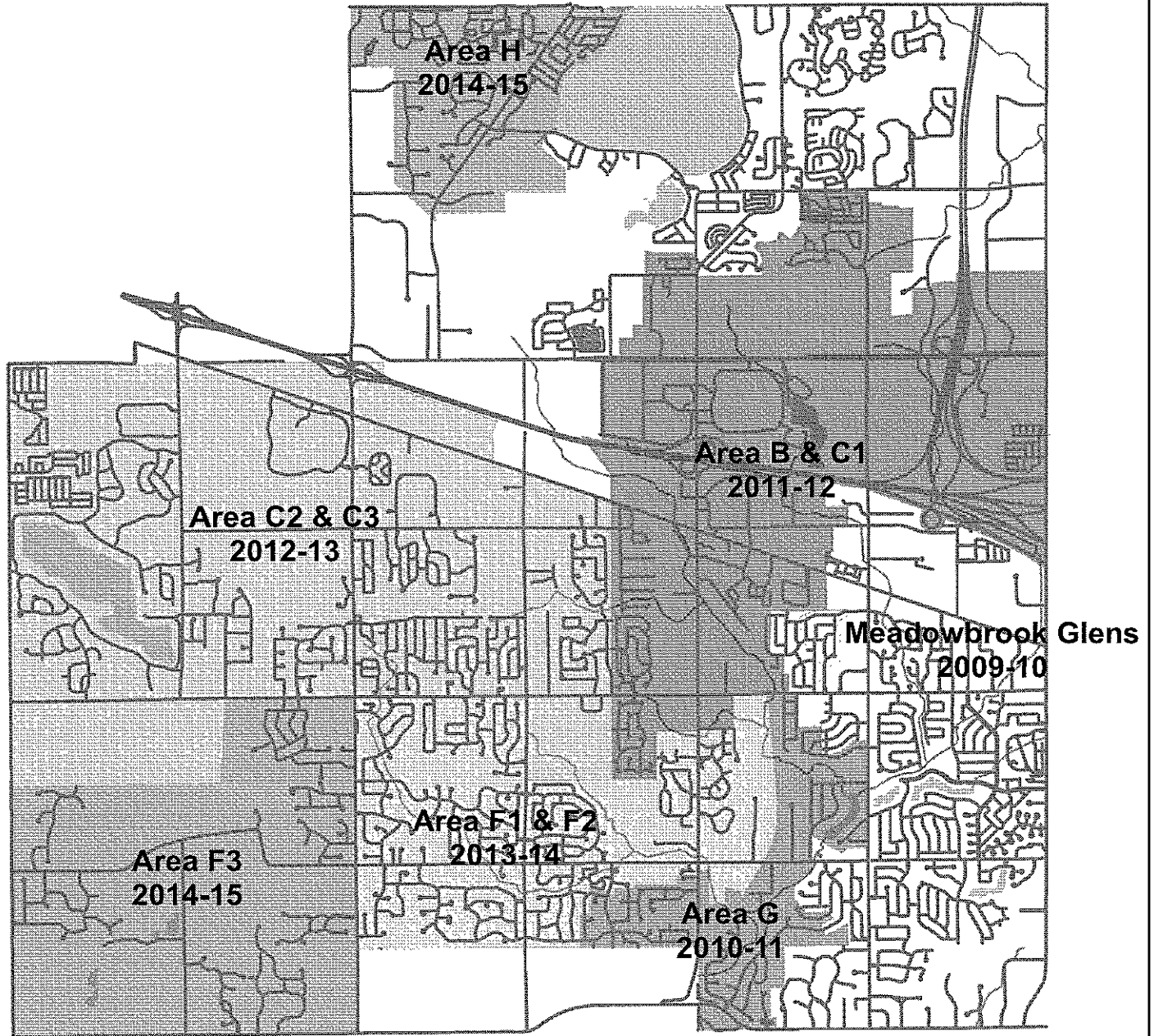
	Dept.	2009-10 Proposed	2010-11 Proposed	2011-12 Proposed	2012-13 Proposed	2013-14 Proposed	2014-15 Proposed	Total	Funding Source
142	Closed Circuit Video Monitoring System for Main and Market Streets	PD	\$0	\$0	\$0	\$142,200	\$0	\$142,200	General Fund
143	Fire Station 3 (new)	FIRE	\$0	\$0	\$0	\$2,580,000	\$0	\$2,580,000	General Fund
144	Front-end Loader (replace #689)	DPS	\$0	\$0	\$0	\$0	\$150,000	\$150,000	General Fund/Allocation
145	Civic Center Roof Replacement	B&G	\$0	\$0	\$0	\$0	\$174,700	\$174,700	General Fund
146	Civic Center Boiler Replacement	B&G	\$0	\$0	\$0	\$0	\$60,000	\$60,000	General Fund
147	Fire Engine 3 (replace)	FIRE	\$0	\$0	\$0	\$0	\$494,000	\$494,000	Police & Fire Fund
148	Police Headquarters Building Renovation and Expansion	PD	\$0	\$0	\$0	\$0	\$6,540,700	\$6,540,700	General Fund
149	Single Axle Large Dump Truck with Front Plow and Underbody Scraper (new)	DPS	\$0	\$0	\$0	\$0	\$252,900	\$252,900	General Fund/Allocation
150	Grader (replace #612)	DPS	\$0	\$0	\$0	\$0	\$300,000	\$300,000	General Fund/Allocation
Other Projects Total			\$2,191,180	\$1,592,000	\$3,945,200	\$3,479,000	\$887,100	\$8,157,900	\$20,252,380

Summary

	2009-10 Proposed	2010-11 Proposed	2011-12 Proposed	2012-13 Proposed	2013-14 Proposed	2014-15 Proposed	Total
Roads	\$72,344,000	\$5,534,000	\$6,438,250	\$5,685,900	\$3,363,600	\$8,131,000	\$101,496,750
Intersections & Signalization	\$420,000	\$762,000	\$550,000	\$0	\$210,000	\$482,000	\$2,424,000
Sidewalks & Non-Motorized Pathways	\$259,500	\$325,200	\$299,000	\$297,000	\$265,000	\$511,900	\$1,957,600
Storm Water System	\$460,942	\$154,860	\$160,950	\$299,000	\$118,000	\$160,000	\$1,353,752
Sanitary Sewer System	\$5,597,000	\$450,000	\$250,000	\$250,000	\$754,000	\$250,000	\$7,551,000
Water Distribution System	\$2,105,000	\$1,031,000	\$22,964,000	\$1,070,000	\$572,900	\$3,300,800	\$31,043,700
Park Development	\$84,022	\$504,781	\$401,000	\$500,000	\$1,170,000	\$725,000	\$3,384,803
Other Projects	\$2,191,180	\$1,592,000	\$3,945,200	\$3,479,000	\$887,100	\$8,157,900	\$20,252,380
GRAND TOTAL	\$83,461,644	\$10,353,841	\$35,008,400	\$11,580,900	\$7,340,600	\$21,718,600	\$169,463,985

SANITARY SEWER REHABILITATION AREAS

LISTED BY YEAR FOR 2009-10 CIP



CITY OF NOVI
 ENGINEERING DIVISION
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1 INCH = 4,792 FEET

MAP PRINT DATE: 2/19/09

MAP INTERPRETATION NOTICE

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