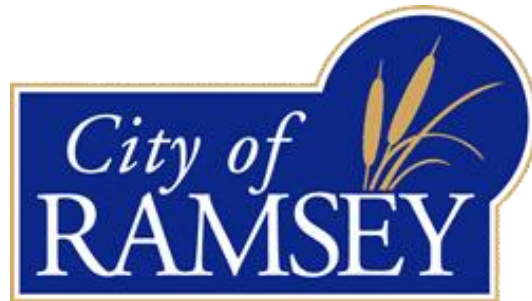


Feasibility Report



Riverdale Drive Extension

(Armstrong Boulevard to Traprock Street)

Ramsey, Minnesota

January 2013

**Feasibility Report
For
Riverdale Drive Extension
Ramsey, Minnesota**

City Council Meeting Date: January 8, 2013

City Project Number: IP 12-22

Mayor: Sarah Strommen

*Council Members: David Elvig
Randy Backous
Jason Tossey
John LeTourneau
Mark Kuzma
Chris Riley*

City Administrator: Kurt Ulrich

Interim City Engineer: Shane Nelson

I hereby certify that this report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under State of Minnesota Statutes 326.02 to 326.16.

Shane M. Nelson, PE

43381
License No.

January 1, 2013
Date

Table of Contents

Introduction.....	1
Design Considerations.....	2
Street Design and Anticipated Traffic Volumes.....	2
Watermain.....	3
Sanitary Sewer.....	4
Storm Water Management.....	6
Easements / Property Acquisition.....	7
Cost Estimates.....	7
Project Financing.....	8
Connection Charges – Sanitary Sewer.....	9
Connection Charges – Water.....	10
Assessment Alternative.....	11
Project Schedule.....	13
Summary and Conclusions.....	14

Introduction

The purpose of this feasibility report is to provide the City of Ramsey with a preliminary examination of the improvements proposed with the Riverdale Drive project. This report was ordered by the City Council at a regular City Council meeting.

Riverdale Drive is a collector street that runs in an east/west direction parallel to Trunk Highway 10. The segments studied in this report include the reconstruction of the existing portion of Riverdale Drive from Armstrong Boulevard to just east of Alpaca Street and the extension of Riverdale Drive from just east of Alpaca Street to Traprock Street. Access to TH10 at Alpaca Street will be eliminated and the access at Traprock Street will be reconfigured to three-quarter's access. Completing this project continues to move the City forward in realizing its goal of obtaining an interchange at the intersection of Armstrong Boulevard with Highway 10. The future interchange layout concept is shown on Figure 1.



Figure 1. Future Interchange Layout Concept.

Consistent with the City's Comprehensive Sanitary Sewer Study and Comprehensive Water Study, it is proposed the sanitary sewer and watermain are also extended under the current alignment of Riverdale Drive. Under the new alignment of Riverdale Drive, it is proposed that watermain is extended easterly to Traprock Street. The extension of sanitary sewer and water utilities are discussed in greater detail in subsequent sections of this report. The project area and roadway location for this project are shown on Figure 2.

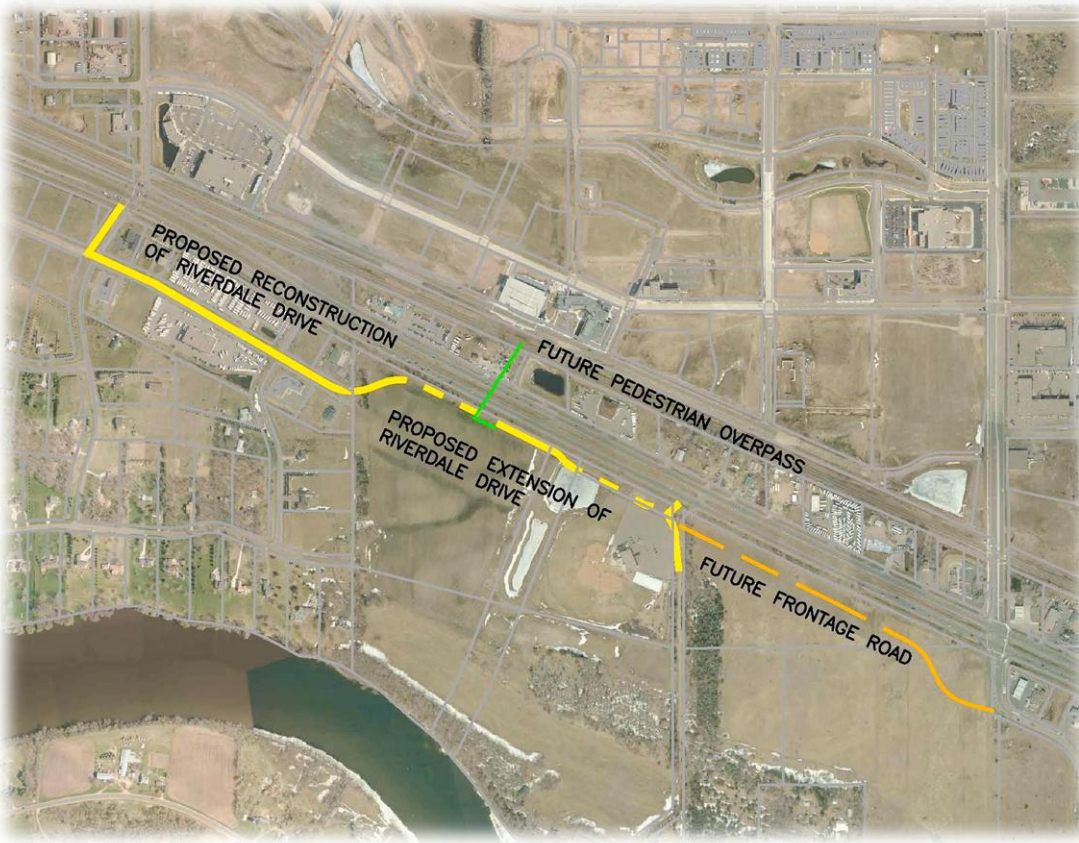


Figure 2. Location of proposed improvements.

Design Considerations

Street Design and Anticipated Traffic Volumes

Determining the cross section and structure of the street is dependent on variables such as soil characteristics, traffic types and volumes that are anticipated during the design life of the initial pavement section. A Geotechnical Exploration has not been completed at this time, however, for purposes of this report it is assumed that subgrade soils are suitable for road construction. The traffic types and volumes will be determined by completing an analysis of the existing and proposed land use of the adjacent property, as well as the additional area that the road will serve in the future. We expect the street to initially carry traffic generated by the properties immediately adjacent to the project, however, it is anticipated that an extension across the Anoka County Regional Park property will be constructed to make a connection with Ramsey Boulevard, at which time the traffic volume is anticipated to increase. Upon the extension to Ramsey Boulevard, Riverdale Drive will function more as a frontage road and will divert local traffic off of TH10.

The preliminary cross section for Riverdale Drive consists of two twelve foot travel lanes with eight foot shoulders. The street will be an urban section with concrete curb and gutter consistent with the intended urban commercial use. A bituminous sidewalk is proposed on the south side of Riverdale Drive.

The total estimated cost for the road and associated bituminous sidewalk is \$2,168,000.

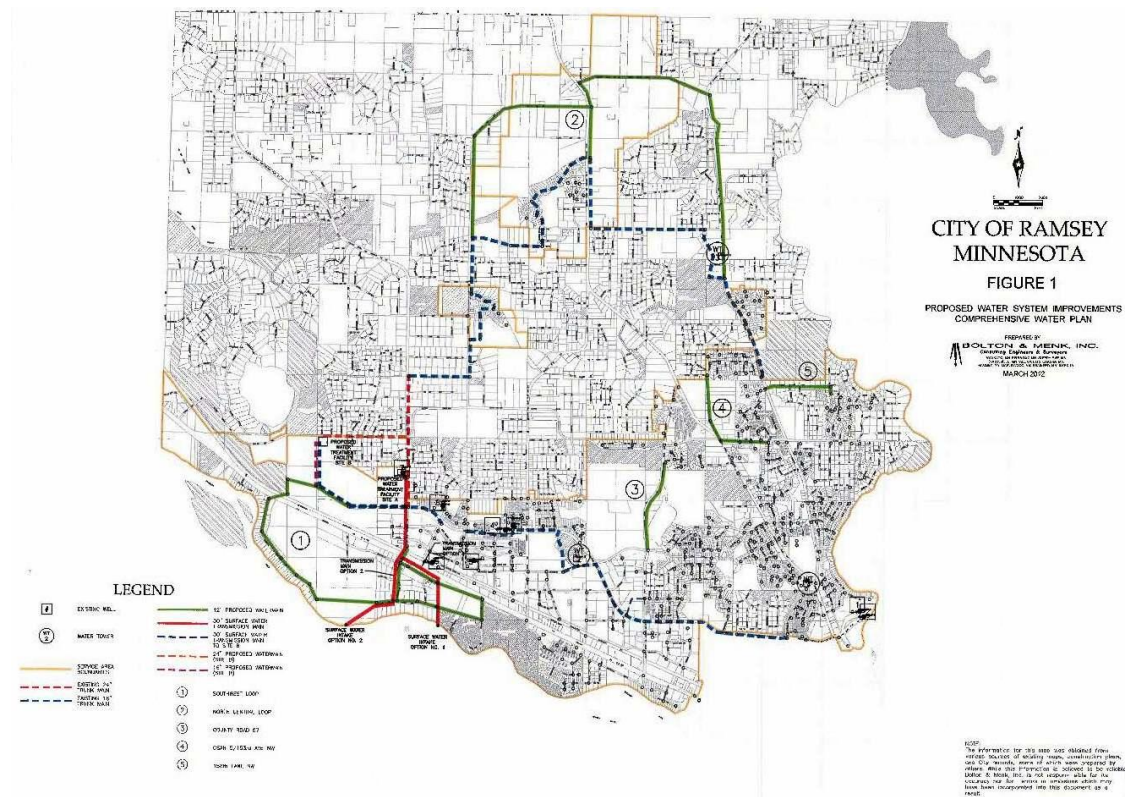
Water Main

A water main extension along the existing and new alignment of Riverdale Drive is also proposed as part of this project. The proposed water main improvements to be completed with this project are shown on Figure 4.



Figure 4. Proposed Water Main improvements.

The water main is currently stubbed approximately 150 feet east of Armstrong Boulevard on Riverdale Drive. Twelve inch watermain is proposed to be extended east under both the reconstructed portion of Riverdale Drive and the proposed extension of Riverdale Drive. Fire Hydrants are proposed to be installed as needed along the new watermain and services will be stubbed to all of the adjacent parcels. The total estimated cost for the watermain extension is \$501,160. Figure 5 below depicts the Trunk Water Main System as per the adopted Comprehensive Water System Study, dated June 2012, prepared by Bolton and Menk.



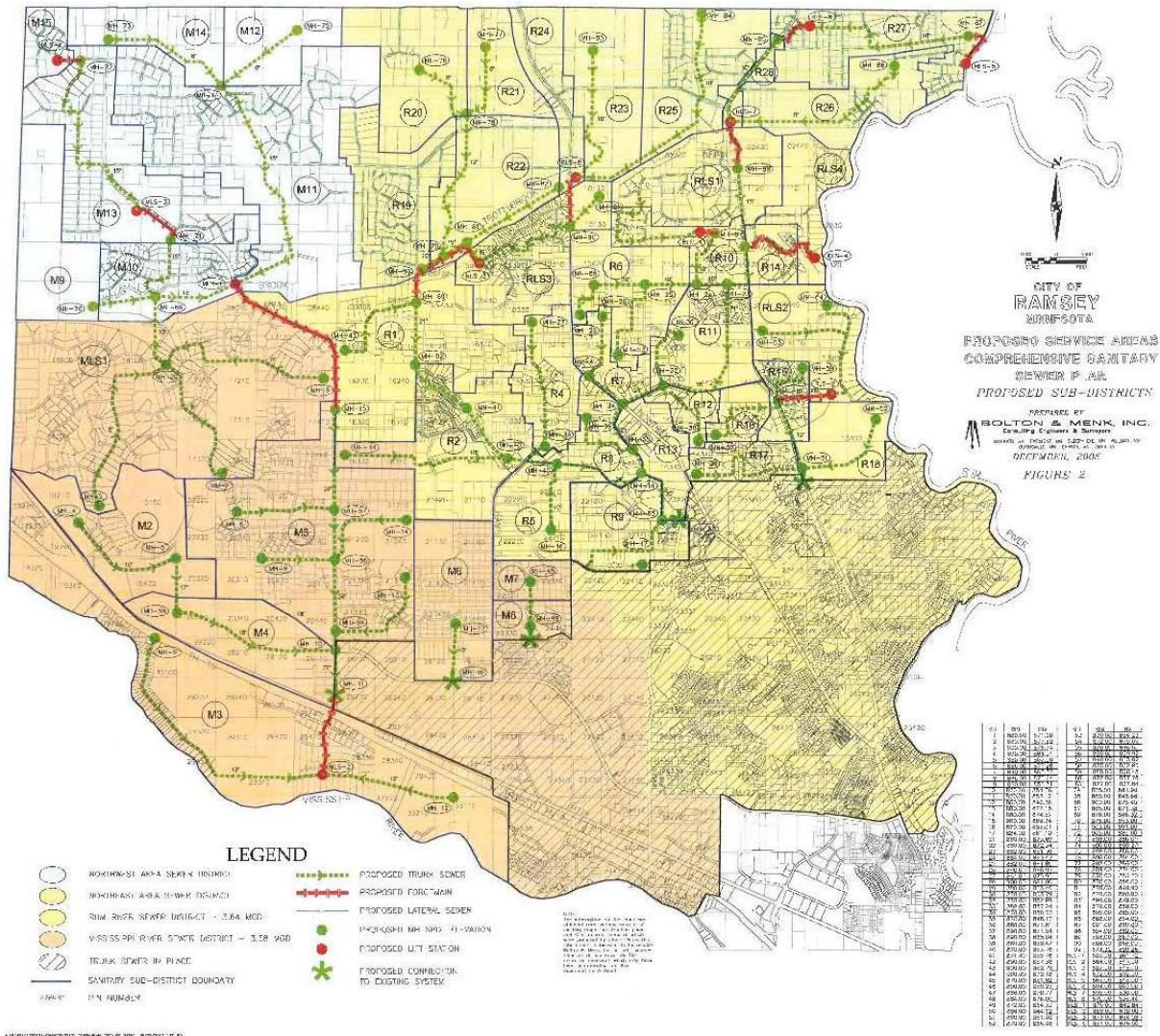


Figure 6. Trunk Sanitary Sewer system for ultimate design.

It is also proposed that a lateral sanitary sewer be extended easterly along Riverdale Drive to approximately 100' east of the existing cul-de-sac. This lateral sanitary sewer will provide sewer access to the existing businesses along the existing segment of Riverdale Drive. The depth of the sanitary sewer at its termination point is estimated to be approximately 8 feet, which inhibits the practicality of an easterly extension to Traprock Street.

As the property abutting the segment of the Riverdale Drive extension develops or re-develops, it will be necessary for the infrastructure for the ultimate sanitary sewer system to be installed. In the interim, it may be possible for the landowner of the adjacent parcels to construct a temporary private lift station and associated forcemain, utilizing the Riverdale Drive lateral as a discharge location. This would provide sanitary sewer availability to the large tracts of land that have development/re-development potential without requiring a significant additional

investment in infrastructure to construct the ultimate system. In the future, upon construction of the ultimate lift station near the intersection of Armstrong Boulevard and 142nd Avenue NW and easterly sewer extension on 142nd Avenue, the temporary private lift station could be abandoned or removed, thus eliminating its operating and maintenance costs.

The total estimated cost for the sanitary sewer extension is \$202,510.



Figure 7. Proposed Sanitary Sewer improvements.

Storm Water Management

Storm water will be collected off the street and boulevards by curb and gutter and storm sewer. The large storm water pond on the south side of Highway 10 will be significantly impacted. It will be necessary to obtain drainage and utility easement rights to mitigate the impacted storm water pond, as well as to provide treatment for the new segment of road.

Easements / Property Acquisition

The permanent roadway easements, as preliminary determined, that will be required for the project are depicted in Figure 8. In addition to the roadway right-of-way, it will also be necessary to obtain a drainage and utility easement for stormwater purposes. The location of the proposed and mitigated stormwater ponds have not been determined at this time. As shown in the figure below, the permanent easements are largely required from two parcels. Preliminary negotiations with the property owners indicate that the property owner's will dedicate the necessary permanent roadway and drainage easements in exchange for receiving the improved access gained by the Riverdale Drive extension and utility availability.



Figure 8. Roadway Easement.

Although a preliminary design is not complete, it is assumed that all proposed improvements will fit into the existing right-of-way on the existing segment of Riverdale Drive. Temporary construction easements will be determined during the design process and obtained by the property owners if necessary.

Cost Estimates

The 2013 construction costs have been estimated for this project. The estimated costs are estimates only and are not guaranteed prices. The costs shown are estimates based on actual bid prices from projects of similar scope and adjusted for inflation. Actual quantities will be determined upon preparation of the construction plans and final contracts will be awarded on a

unit price basis and the contractor will only be paid for work completed. No costs are included for easements or wetland mitigation / permitting.

Detailed cost estimates for the sanitary sewer and water extensions have been completed in conjunction with this report. The estimates include construction, a 10% allowance for contingency. A summary of the cost estimate for the entire project is presented in Table 1.

Table 1. Estimate of Probable Cost

Summary - Estimate of Probable Cost	
Item	Estimated Total Costs
Road Construction	\$2,168,000.00
Watermain	\$521,000.00
Sanitary Sewer	\$202,500.00
Total	\$2,891,500.00

Financing

The City received a Cooperative Agreement grant in the amount of \$702,000 which will partially fund the road construction and associated drainage improvements. The remaining of the road, associated drainage improvements, and bituminous sidewalk will be funded by the City’s Municipal State Aid (MSA) account.

The costs for extending the sanitary sewer and water main will be funded in the near term by the sewer and water enterprise funds, with those funds being paid back over time through the collection of connection charges and/or assessments.

A summary of the funding is as follows:

Table 2. Financing Summary.

Financing Summary	
Description	Amount
Cooperative Agreement Grant	\$702,000
MSA Fund	\$1,466,000
Sewer Enterprise Fund	\$202,500
Water Enterprise Fund	\$521,000
Total	\$2,891,500

Connection Charges – Sanitary Sewer

The City’s schedule of rates and charges currently specifies connection fees for trunk sanitary sewer (connection charge) and lateral sanitary sewer (lateral benefit charge) which would be preferable for recapturing the capital investment for the utilities associated with this project. According to the adopted 2013 schedule of rates and charges, the above-mentioned fees are as follows:

Sanitary Sewer Charges

Sanitary Sewer Connection Charge (Commercial/Industrial) \$3,308 per acre

Sanitary Sewer Lateral Benefit Charge \$3,328 per acre

The City also collects a Sanitary Sewer Availability Charge (SAC) at the time of connection. However, the revenue from the SAC charge is forwarded to the Metropolitan Council and is the funding source for the regional treatment and disposal system owned and operated by the Metropolitan Council Environmental Services.

A preliminary examination of the land area of the adjacent properties has been completed utilizing Geographic Information Systems (GIS) and preliminary estimates of the revenue collected at the time of connection are presented below in Table 3.

Table 3. Estimated Sanitary Sewer Connection Charge Revenue.

Address	8000 Highway 10 NW	7955 Riverdale Drive	7945 Riverdale Drive	7815 Riverdale Drive	7103 Riverdale Drive
Owner	Premier Armstrong LLC	TIRAED LLC	Pearson Investments LLC	DSB Ventures LLC	Pearson Investments LLC
Area of Lot (ac)	1.11	1.23	4.57	2.38	6.84
Connection Charge (\$3,308/ac)	\$3,671.88	\$4,068.84	\$15,117.56	\$7,873.04	\$22,626.72
Lateral Benefit Charge (\$3,328/ac)	\$3,694.08	\$4,093.44	\$15,208.96	\$7,920.64	\$22,763.52

Address	7850 Riverdale Drive	7820 Riverdale Drive	Vacant, unassigned	7550 Highway 10 NW	Total
Owner	The Bank of Elk River Jesse Ternus	Brad Fitch	Hope Fellowship of Ramsey Inc	2-OI LLC	
Area of Lot (ac)	1.53	1.6	29.24	15.44	63.94
Connection Charge (\$3,308/ac)	\$5,061.24	\$5,292.80	\$96,725.92	\$51,075.52	\$211,513.52
Lateral Benefit Charge (\$3,328/ac)	\$5,091.84	\$5,324.80	\$97,310.72	-	\$161,408.00

Totals \$372,921.52

As can be seen in Table 3 above, the anticipated revenue ultimately collected for the Sanitary Sewer improvements is estimated to be \$372,921, which is greater than the estimated expenditures for this project currently estimated at \$202,500. However, the additional revenue

collected is necessary to fund the other trunk improvements that are not proposed to be constructed with this project but are necessary for the existing and ultimate system (i.e. off-site trunk sewer mains, lift stations, forcemains, etc).

Connection Charges – Water

The City’s schedule of rates and charges currently specifies Water Availability Charges (WAC) and connection fees for trunk water facilities (connection charge) and lateral water facilities (lateral benefit charge) which would be preferable for recapturing the capital investment. According to the adopted 2013 schedule of rates and charges, the above-mentioned fees are as follows:

Water Charges

Water Availability Charge (WAC)	\$1,148 per address
Water Connection Charge (Commercial / Industrial)	\$5,835 per acre
Water Lateral Benefit Charge	\$6,143 per acre

A preliminary examination of the land area of the adjacent properties has been completed utilizing Geographic Information Systems (GIS) and preliminary estimates of the revenue collected at the time of connection are presented below in Table 4.

Table 4. Estimated Water Main Connection Charge Revenue.

Address	8000 Highway 10 NW	7955 Riverdale Drive	7945 Riverdale Drive	7815 Riverdale Drive	7103 Riverdale Drive
Owner	Premier Armstrong LLC	TIRAED LLC	Pearson Investments LLC	DSB Ventures LLC	Pearson Investments LLC
Area of Lot (ac)	1.11	1.23	4.57	2.38	6.84
Water Availability Charge (\$1,148/Ea)	\$1,148.00	\$1,148.00	\$1,148.00	\$1,148.00	\$1,148.00
Connection Charge (\$5,835/ac)	\$6,476.85	\$7,177.05	\$26,665.95	\$13,887.30	\$39,911.40
Lateral Benefit Charge (\$6,143/ac)	\$6,818.73	\$7,555.89	\$28,073.51	\$14,620.34	\$42,018.12

Address	7850 Riverdale Drive	7820 Riverdale Drive	Vacant, unassigned	7550 Highway 10 NW	Total
Owner	The Bank of Elk River Jesse Ternus	Brad Fitch	Hope Fellowship of Ramsey Inc	2-OI LLC	
Area of Lot (ac)	1.53	1.6	29.24	15.44	63.94
Water Availability Charge (\$1,148/Ea)	\$1,148.00	\$1,148.00	\$1,148.00	\$1,148.00	\$10,332.00
Connection Charge (\$5,835/ac)	\$8,927.55	\$9,336.00	\$170,615.40	\$51,075.52	\$334,073.02
Lateral Benefit Charge (\$6,143/ac)	\$9,398.79	\$9,828.80	\$179,621.32	\$94,847.92	\$297,935.50

Totals **\$632,008.52**

As can be seen in Table 4 above, the anticipated revenue ultimately collected for the Water System improvements is estimated to be \$632,008, which is greater than the estimated expenditures for this project currently estimated at \$521,000. However, the additional revenue

collected is necessary to fund the other trunk and system improvements that are not proposed to be constructed with this project but are necessary for the existing and ultimate system (i.e. water towers, off-site watermains, wells, etc).

If the City proceeds with this project and funds the sanitary sewer and watermain extensions through the enterprise funds, the City could expect to replenish the funds at some future point in time through the collection of the connection charges as indicated earlier in this section. Providing that the enterprise funds have sufficient balances to fund these improvements in the interim period, this method is advantageous as it does not require that the City specially assess the costs to the benefitting properties.

Assessment Alternative

Alternatively, if the City would prefer to finance the costs through special assessments it may proceed with the assessment process as provided per MN Statutes 429 and the City Charter. Assessment of the costs of the sanitary sewer and watermain extension would provide a known timetable for repayment of the expenditures. However, the assessment process may affect the timeline for this project as City Charter provides a mandatory 60-day waiting period following the public improvement hearing. City Charter also provides that a project may be stopped by a counter-petition of the properties proposed to be assessed.

If the project proceeded as an assessment project, one-hundred percent of the lateral costs for the utilities would be assessed to the benefitting properties. Therefore, for the Sanitary Sewer the entire cost of the 8" lateral on Riverdale Drive would be assessed. The cost of the Riverdale Drive sanitary sewer lateral is estimated at \$167,900.

As discussed earlier, the Comprehensive Water System Study depicts the watermain proposed with this project as a Trunk Facility. Therefore, only the lateral portion of the cost could be assessed to the benefitting properties, with the additional cost for upsizing to a 12" trunk being funded by the collection of the trunk Connection Charge. The cost of an 8" watermain lateral along the entire length of Riverdale Drive is estimated at \$338,000.

If the City proceeded with this project as an assessment project, it would be necessary to assess all benefitting properties. The total estimated cost to be assessed for the utilities is \$505,900. It would be recommended that the assessments be distributed by the area method given the land use and zoning of the benefitting properties. Assessments are usually amortized over time, usually 20 years for utility improvements, at an interest rate in the order of 6%.

An exhibit showing the benefitting properties that would receive an assessment for the utility extension is shown below as Figure 8.



Figure 8. Benefitting Properties for Sanitary Sewer and Water Main Extensions.

A preliminary examination of the land area of the benefitting properties has been completed utilizing Geographic Information Systems (GIS) and preliminary estimates of the proposed assessments for the sanitary sewer extension are presented below in Table 5.

Table 5. Proposed Assessment Amounts for Sanitary Sewer Extension – Assessment Alternative.

Address	8000 Highway 10 NW	7955 Riverdale Drive	7945 Riverdale Drive	7815 Riverdale Drive	7103 Riverdale Drive
Owner	Premier Armstrong LLC	TIRAED LLC	Pearson Investments LLC	DSB Ventures LLC	Pearson Investments LLC
Area of Lot (ac)	1.11	1.23	4.57	2.38	6.84
Assessment Amount per Acre	\$3,461.86	\$3,461.86	\$3,461.86	\$3,461.86	\$3,461.86
Proposed Assessment Amount	\$3,842.66	\$4,258.08	\$15,820.68	\$8,239.22	\$23,679.09

Address	7850 Riverdale Drive	7820 Riverdale Drive	Vacant, unassigned	Total
Owner	The Bank of Elk River Jesse Ternus	Brad Fitch	Hope Fellowship of Ramsey Inc	
Area of Lot (ac)	1.53	1.6	29.24	48.5
Assessment Amount per Acre	\$3,461.86	\$3,461.86	\$3,461.86	
Proposed Assessment Amount	\$5,296.64	\$5,538.97	\$101,224.66	\$167,900.00

Totals \$167,900.00

The property located at 7550 Highway 10 would not receive an assessment for the sanitary sewer as the depth does not allow for the sanitary sewer to be extended to that property.

A similar preliminary examination of the land area of the adjacent properties has been completed for the watermain extension utilizing Geographic Information Systems (GIS) and preliminary estimates of the proposed assessments are presented below in Table 6.

Table 6. Proposed Assessment Amounts for Water Extension – Assessment Alternative.

Address	8000 Highway 10 NW	7955 Riverdale Drive	7945 Riverdale Drive	7815 Riverdale Drive	7103 Riverdale Drive
Owner	Premier Armstrong LLC	TIRAED LLC	Pearson Investments LLC	DSB Ventures LLC	Pearson Investments LLC
Area of Lot (ac)	1.11	1.23	4.57	2.38	6.84
Assessment Amount per Acre	\$5,286.21	\$5,286.21	\$5,286.21	\$5,286.21	\$5,286.21
Proposed Assessment Amount	\$5,867.69	\$6,502.03	\$24,157.96	\$12,581.17	\$36,157.65

Address	7850 Riverdale Drive	7820 Riverdale Drive	Vacant, unassigned	7550 Highway 10 NW	Total
Owner	The Bank of Elk River Jesse Ternus	Brad Fitch	Hope Fellowship of Ramsey Inc	2-OI LLC	
Area of Lot (ac)	1.53	1.6	29.24	15.44	63.94
Assessment Amount per Acre	\$5,286.21	\$5,286.21	\$5,286.21	\$5,286.21	
Proposed Assessment Amount	\$8,087.89	\$8,457.93	\$154,568.66	\$81,619.02	\$338,000.00

Totals **\$338,000.00**

If the City proceeded with this project with funding of the utility extensions through assessments, the Lateral Benefit Charges would not apply at the time of connection.

Project Schedule

Provided that the City proceeds with this project, the following schedule could be anticipated:

Project Schedule	
Task	Date
Order Feasibility Study	December 11, 2012
Accept Feasibility Study and Order Plans and Specifications	January 8, 2013
Approve Plans, Specifications and Order Advertisement for Bids	April 23, 2013
Receive Bids	June 3, 2013
Award Construction Contract *	June 11, 2013
Begin Construction	July 2013
Substantial Completion	October 2013
Final Completion	June 2014

* Project must be awarded by June 30, 2013 otherwise co-operative agreement grant becomes unavailable.

Note: The above schedule assumes that the project will move forward utilizing the connection charge method of financing. If the assessment method is utilized, the schedule must be revised

to include the public improvement hearing and assessment hearing as required by MN State Statute 429 and the 60-day waiting period as required per the City Charter.

Conclusions and Recommendations

We find that this project is necessary, cost effective and feasible from a technical and engineering standpoint. In reviewing the financing alternatives, it appears that the option of connection charges at the time of connection has several advantages. First, the nature of recapturing the capital expenditure is via a connection charge vs. an assessment which may be counter-petitioned. The connection charge method also has a timing advantage, as it will not be necessary to hold the public improvement hearings and assessment hearing that is required by MN State Statutes, nor will it be necessary to have the 60-day waiting period after the public improvement hearing required by the City's Charter. Proceeding with this project using the Lateral Benefit Charge as a mechanism for repayment of the capital investment will enable the City to keep this project on schedule and will not jeopardize the \$702,000 Co-operative Agreement Grant.

This project is not recommended to be combined with any other projects. This project is large enough to attract competitive bids as a stand-alone project.

We recommend that the City Council accept this report and proceed with the project utilizing the established connection charge method as a funding/repayment mechanism for the capital expenditure of extending the utilities.