

**City of Ramsey**  
**Agenda**  
**Public Works Committee**  
**Tuesday, March 21, 2017**  
**5:30 pm**  
**Lake Itasca Room, 7550 Sunwood Drive NW**

1. **Call to Order**
2. **Citizen Input**
3. **Approve Agenda**
4. **Approve Minutes**
  1. Approve Public Works Committee Meeting Minutes
5. **Committee Business**
  1. Nominate Chair and Vice-Chair of the Public Works Committee.
  2. Consider Recommending Council Approval of City Cost Participation for Looped Watermain Connection through Brookfield 8th Addition
  3. Review of Municipal Water System Control and Alarm Systems
  4. Authorize Professional Services for Design and Installation of Emergency Generator at Well House # 3
  5. Consider Recommending City Council Approval for Speed Zone Study on Sunfish Lake Boulevard
6. **Committee/Staff Input**
  1. Review of Rivers Bend Street Reconstruction Assessments
  2. Update on COR Wear Course Improvements
  3. Staff Updates on Improvement Projects and Items of Interest
  4. Review Future Topics Calendar
7. **Adjournment**

**Public Works Committee**

4. 1.

**Meeting Date:** 03/21/2017

**Submitted For:** Grant Riemer, Engineering/Public Works

**By:** MaryJo Warner, Engineering/Public Works

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**Title:**

Approve Public Works Committee Meeting Minutes

**Purpose/Background:**

Review and approve attached meeting minutes dated January 17, 2017.

**Timeframe:**

5 minutes

**Observations/Alternatives:**

n/a

**Funding Source:**

n/a

**Recommendation:**

**Action:**

Motion to approve Public Work Committee meeting minutes dated January 17, 2017.

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**Attachments**

Minutes

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**Form Review**

<b>Inbox</b>	<b>Reviewed By</b>	<b>Date</b>
Grant Riemer	Grant Riemer	03/08/2017 10:14 AM
Kurt Ulrich	Kurt Ulrich	03/09/2017 02:12 PM
Form Started By: MaryJo Warner		Started On: 03/07/2017 11:09 AM
Final Approval Date: 03/09/2017		

**PUBLIC WORKS COMMITTEE  
CITY OF RAMSEY  
ANOKA COUNTY  
STATE OF MINNESOTA**

The Public Works Committee conducted a regular meeting on Tuesday, January 17, 2017, at the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, Minnesota.

Members Present:     Chairperson Chris Riley  
                            Councilmember Jill Johns  
                            Councilmember Mark Kuzma

Absent:                 None

Also Present:         Parks and Assistant Public Works Superintendent Mark Riverblood  
                            Public Works Superintendent Grant Riemer  
                            City Engineer Bruce Westby

**1.     CALL TO ORDER**

Chairperson Riley called the regular meeting of the Public Works Committee to order at 5:30 p.m.

**2.     CITIZEN INPUT**

There was none.

**3.     APPROVE AGENDA**

Motion by Councilmember Johns, seconded by Councilmember Kuzma, to approve the agenda, as presented.

Motion carried. Voting Yes: Chairperson Riley, Councilmembers Johns and Kuzma. Voting No: None.

**4.     APPROVE MINUTES**

**4.01: Approve November 15, 2016, Meeting Minutes**

Motion by Councilmember Johns, seconded by Chairperson Riley, to approve the following minutes:

Regular Meeting Minutes dated Tuesday, November 15, 2016

Motion carried. Voting Yes: Chairperson Riley, Councilmembers Johns and Kuzma. Voting No: None.

## **5. COMMITTEE BUSINESS**

### **5.01: Finalize the Landscape Renovation for the Center Median in the Sweet Bay Ridge Development**

Parks and Assistant Public Works Superintendent Riverblood reviewed the staff report and recommendation to the City Council reaffirming the proposed landscape renovation.

Chairperson Riley requested clarification and discussion regarding repair of the irrigation system.

Parks and Assistant Public Works Superintendent Riverblood stated the irrigation system's missing sprinkler heads would be replaced and solar powered controllers would be installed. He confirmed staff's position that an improved irrigation system is a necessary component of the median landscaping renovation project.

Councilmember Kuzma asked whether the median area is ready for reconstruction. Chairperson Riley confirmed this.

Brent Garland, 7574 163rd Avenue NW, stated he wanted to get more information on behalf of his neighbors on the project, as well as clarification about where funding would come from. He added residents are opposed to a neighborhood association.

Chairperson Riley stated the Public Works Committee's recommendation to the City Council is that the total project cost of \$15,650, as well as additional annual maintenance cost, would be covered by City funds.

Parks and Assistant Public Works Superintendent Riverblood stated the project has been under discussion for two years, and offered to provide previous meeting minutes for Mr. Garland's review. He added various other solutions have been reviewed, including complete removal of the median. He noted renovation is the only cost effective option.

Public Works Superintendent Riemer stated the landscape project's annual maintenance costs will be covered under the Public Works Maintenance Fund.

Councilmember Kuzma stated the landscaping needs to be maintained for safety reasons, as kids cut across the median to cross the street.

Mr. Garland stated the median has plants but it is not overgrown. He expressed concern that neighborhood residents are not getting the facts about the project.

Chairperson Riley stated City staff have made multiple efforts to raise neighborhood awareness of the project, but there has been little interest or response.

Mr. Garland stated he has heard from neighbors that the project cost will be covered by assessments.

Chairperson Riley stated assessments were never discussed as an option.

Public Works Superintendent Riemer stated neighborhood residents have received 2 letters from City staff, most recently on September 29, 2016, which clearly outline project details, timeline and cost. He added a request for partial funding has been submitted to the neighboring developer, Lennar Homes, and is under consideration.

Councilmember Kuzma requested clarification regarding the proposed project timeline.

Parks and Assistant Public Works Superintendent Riverblood stated staff recommends that project approval be considered by the City Council at their next meeting, as spring construction schedules are filling up.

Chairperson Riley thanked Mr. Garland for his attendance and input.

Parks and Assistant Public Works Superintendent Riverblood stated additional project information is available on the City's website under Documents/Public Works Agenda's/2016 and 2017.

Motion by Councilmember Johns, seconded by Councilmember Kuzma, to recommend City Council approval of a landscape renovation plan for Sweet Bay Ridge Development center medians.

Motion carried. Voting Yes: Chairperson Riley, Councilmembers Johns and Kuzma. Voting No: None.

#### **5.02: Request for Rate Change at Electrical Vehicle Charging Station**

Public Works Superintendent Riemer reviewed the staff report and rate change proposal. He added this proposal is the result of feedback from a resident who indicated she would use the charging station more if it would stop charging a fee for use of the station, when her battery is fully charged. He noted the charging station currently charges \$1/hour and continues to charge \$1/hour until the car is unplugged from the station. Public Works Superintendent Riemer stated staff recommends a rate reduction at the electrical vehicle charging station. He added the rate can be easily adjusted. He noted that only one resident comment has been received by City staff to date and requested input from the Committee.

Councilmember Kuzma stated he would recommend a reduction of .20 per hour, to .80 per hour.

Councilmember Johns stated the charging station generated an income of \$19.87, which is minimal.

Councilmember Kuzma asked whether City staff had considered removing the charging station.

Public Works Superintendent Riemer stated electric car charging stations are viewed as important urban amenities. He added it is a positive and interesting feature, and can be used in marketing the COR.

Motion by Councilmember Kuzma, seconded by Councilmember Johns, to reduce the electric vehicle charging station's per/hour pricing from \$1.00/hour to \$.80 cents/hour, but retain the policy of charging for every hour that a vehicle is plugged into the station.

Motion carried. Voting Yes: Chairperson Riley, Councilmembers Kuzma and Johns. Voting No: None.

**5.03: Consider Recommendation to City Council to Accept Draft Feasibility Report for Sunwood Drive Reconstruction, Improvement Project #17-00**

City Engineer Westby reviewed the staff report and summarized the draft Feasibility Report for the Sunwood Drive Reconstruction project including existing conditions, proposed improvements, estimated costs, and proposed funding program. City Engineer Westby also reviewed staff's conclusions and recommendations for the project which included using a 10-ton pavement design, excluding improvements to the trail north of Sunwood Drive, requiring private property owners to protect, relocate and repair their own private irrigation systems, and to order an assessment appraisal consultation report with this project. City Engineer Westby said staff is trying to conduct meetings with assessable property owners before the February 14, 2017, Public Hearing. He stated proposed assessment amounts have not yet been determined as this is the first application of the City's Special Assessments Policy for industrial properties so staff wanted to discuss available options with the Public Works Committee first. He reviewed a draft rough comparison between two optional assessment methods, the "adjusted front footage" method and the "area" method, which shows the adjusted front footage method results in less variable assessments (\$9K - \$40K), whereas applying the area method results in assessments that are much more variable (\$3K - \$42K). City Engineer Westby requested Committee feedback and comments on the application of assessments for this project.

Chairperson Riley stated the depth of the assessable properties could be equalized to put assessments more in proportion if the area method is used.

City Engineer Westby stated this would significantly increase assessments on shallower parcels.

Councilmember Kuzma stated he would support this method.

Councilmember Kuzma requested clarification regarding the road's maintenance history.

City Engineer Westby stated this road carries about 3,500 ADT and has higher volumes of truck traffic.

Chairperson Riley stressed the importance of a quick project since this is a high-traffic area. He requested clarification regarding the recommended 4 inches of pavement, which seems light.

City Engineer Westby stated the pavement corings indicated that 4-5 inches of pavement currently exists over about 5 inches of class 5, which meets a 10 ton design, and that the proposed pavement section includes 5 inches of stabilized reclaim material, which is stronger than standard class 5 aggregate base based on a higher granular equivalency factor, with 4 inches of new bituminous pavement placed on top, which also meets a 10 ton design.

Chairperson Riley stated he would recommend a pavement core requirement be bid with the project, as well as regular inspections during paving.

City Engineer Westby stated this can likely be done at little to no increase in project costs.

Councilmember Johns asked how many pavement corings are typically completed.

City Engineer Westby stated borings are currently only completed on State Aid streets at variable intervals typically around 1,000 feet.

Councilmember Kuzma asked whether the City keeps accurate records of street construction.

City Engineer Westby confirmed the City does maintain record drawings of newer street and utility projects, but added staff is working on scanning all older City records which are stored in boxes in numerous areas around City Hall so older records are not easy to locate or retrieve.

City Engineer Westby thanked the Committee for their input. He added the Feasibility Report and preliminary assessments will be reviewed by the City Council at their January 24, 2017, regular meeting.

Motion by Chairperson Riley, seconded by Councilmember Johns, to recommend that the City Council accept the recommendations outlined in the draft Feasibility Report for Sunwood Drive Reconstruction, City Improvement Project #17-00.

Motion carried. Voting Yes: Chairperson Riley, Councilmembers Johns and Kuzma. Voting No: None.

**5.04: Consider Recommendation to City Council to Accept Draft Feasibility Report for Alpine Drive Reconstruction, Improvement Project #17-01**

City Engineer Westby reviewed the staff report and summarized the draft Feasibility Report for this proposed project including existing conditions, proposed improvements, estimated costs, and proposed funding program. City Engineer Westby also reviewed staff's conclusions and recommendations for the project which included using a 10-ton pavement design, excluding improvements to the trail south of Alpine Drive, and requiring private property owners to protect, relocate and repair their own private irrigation systems. He added the road's aggregate base was constructed of recycled crushed concrete that was graded such that it became rehydrated over the years creating a weak concrete slab which cracked at semi-regular intervals causing the tenting that occurs in cold weather months.

Chairperson Riley stated the Feasibility Report does not include a clear depiction of the issues associated with the recycled crushed concrete aggregate base layer.

City Engineer Westby agreed to add that information to the Feasibility Report.

Chairperson Riley asked if there is any indication of who built the roadway using recycled concrete.

City Engineer Westby stated he has not found any record of that, but that it was probably done as a cost savings measure, utilizing crushed recycled concrete that was readily available.

City Engineer Westby stated there are no proposed assessments for the project as the existing residential properties on the west end of the project have primary driveway access onto Armstrong Boulevard, with some secondary accesses onto Alpine Drive.

Motion by Councilmember Kuzma, seconded by Councilmember Johns, to recommend that the City Council accept the recommendations outlined in the draft Feasibility Report for Alpine Drive Reconstruction, City Improvement Project #17-01.

Motion carried. Voting Yes: Chairperson Riley, Councilmembers Kuzma and Johns. Voting No: None.

**5.05: Consider Recommendation to City Council to Accept Draft Feasibility Report for Rivers Bend Street Reconstructions, Improvement Project #17-02**

City Engineer Westby reviewed the staff report for the Rivers Bend Street Reconstructions project. City Engineer Westby then reviewed staff's recommendations for the project which included completing the proposed improvements in 2018 (or later) in conjunction with a nearby street reconstruction project such as the Stanhope Terrace Street Reconstruction project scheduled for 2018 construction. He added potential assessments have yet to be discussed with neighborhood residents, and noted there will be further review when the project is re-introduced.

Motion by Councilmember Kuzma, seconded by Councilmember Johns, to table the Draft Feasibility Report for Rivers Bend Street Reconstructions, Improvement Project #17-02, for further consideration of construction in 2018 with a nearby street reconstruction project.

Motion carried. Voting Yes: Chairperson Riley, Councilmembers Kuzma and Johns. Voting No: None.

Councilmember Kuzma asked for an update on unpaved roads within The COR development.

City Engineer Westby stated several roads in The COR were left without a wear course when development ceased and are deteriorating quickly despite minimal traffic. Staff will address these necessary improvements within in the CIP.

Public Works Superintendent Riemer stated the RTC 9<sup>th</sup> Addition development north of the COR is still developing and includes several private streets that do not have a wear course of pavement. He added City staff tried to contact the developer regarding possible collaboration with the City, but have not received a response.

Chairperson Riley requested that this issue be reviewed at the Public Works Committee's next meeting.

## **6. COMMITTEE / STAFF INPUT**

### **6.01: Updates on Corridor Studies for Trunk Highway 47, County State Aid Highway 5, and County State Aid Highway 83**

City Engineer Westby provided status updates on the proposed Corridor Studies for State Trunk Highway 47, County State Aid Highway 5, and County State Aid Highway 83. He stated MnDOT representatives said they may be able to complete an Access Management Study or a Road Safety Audit on Highway 47. He also said a meeting is being planned with the new Assistant County Engineer to discuss Anoka County's ability to partner with the City in completing corridor studies on CSAH 5 and CSAH 83.

Councilmember Johns stated these studies may coincide with the City of Champlin's proposed study of Highway 169.

### **6.02: Review 2017 Capital Improvement Program Projects**

City Engineer Westby stated the Mississippi River Trail project is graded and based, and will be paved when the weather warms up.

City Engineer Westby stated striping improvements to Sunwood Drive are under consideration, including revisions to the left-turn lane striping at the west entrance to Residence at The COR, and revisions to the striping at the entrance to the new Casey's store. He added the roadway was patched in 2016.

City Engineer Westby stated the City is considering the construction of a regional infiltration basin for development within The COR, noting that many properties in The COR do not have capacity to accommodate on-site infiltration.

Chairperson Riley expressed concern that an infiltration basin is not a good use of street frontage.

Councilmember Kuzma asked whether the sale of stormwater credits to the City of Anoka could be considered.

City Engineer Westby stated the basin is currently proposed to be located north of the BNSF railway just west of Ramsey Boulevard. He also said he would look into options for selling infiltration credits to Anoka though this may not be feasible given Ramsey's needs.

City Engineer Westby reviewed the proposed Riverdale Drive extension to Ramsey Boulevard, for which the City is acquiring 5.3 acres of right-of-way from Anoka County Parks.

Chairperson Riley asked why the trail and roadway were not side by side.

City Engineer Westby stated the trail runs through open space landscaped with drought-resistant plants and grasses, as originally laid out in the Park Master Plan. City Engineer Westby stated lighting is also being considered for the Riverdale corridor, although costs and funding sources have yet to be determined.

City Engineer Westby stated he would provide an update on proposed 2017 water tower improvements at the Committee's next meeting.

### **6.03: Staff Updates on Improvement Projects and Items of Interest**

City Engineer Westby reviewed improvement projects, including the Hanson Boulevard Railroad Overpass, the CSAH 78 expansion, and the Foley Boulevard grade separation projects in Coon Rapids. He also noted MnDOT will be constructing a cable median barrier project along Highway 10 through the City of Ramsey for 2018 (from Thurston Avenue in Anoka to Highway 101 in Elk River).

### **6.04: Review Future Topics Calendar**

Chairperson Riley requested clarification regarding the cost of the proposed well siting study.

City Engineer Westby stated the cost estimate for the proposed study is \$75,000.

Councilmember Johns asked whether agenda items for the Committee's February meeting will be moved to the March agenda.

City Engineer Westby confirmed this.

## **7. ADJOURNMENT**

Motion by Councilmember Kuzma, seconded by Councilmember Johns to adjourn the Public Works Committee meeting.

Motion carried.

The regular meeting of the Public Works Committee adjourned at 7:36 p.m.

Respectfully submitted,

Grant Riemer  
Public Works Superintendent

Drafted by Mary Mullen  
*TimeSaver Off Site Secretarial, Inc.*

**Public Works Committee**

**5. 1.**

**Meeting Date:** 03/21/2017

**Submitted For:** Grant Riemer, Engineering/Public Works

**By:** MaryJo Warner, Engineering/Public Works

**Title:**

Nominate Chair and Vice-Chair of the Public Works Committee.

**Purpose/Background:**

Annually, the Public Works Committee nominates a Chair and Vice-Chair of their meetings.

**Timeframe:**

5 minutes.

**Observations/Alternatives:**

n/a

**Funding Source:**

n/a

**Recommendation:**

**Action:**

Motion to appoint \_\_\_\_\_ as Chairperson of the Public Works Committee for the term April 1, 2017 to March 31, 2018.

-and-

Motion to appoint \_\_\_\_\_ as Vice Chairperson of the Public Works Committee for the term April 1, 2017 to March 31, 2018.

**Attachments**

*No file(s) attached.*

**Form Review**

<b>Inbox</b>	<b>Reviewed By</b>	<b>Date</b>
Grant Riemer	Grant Riemer	03/16/2017 09:45 AM
Kurt Ulrich	MaryJo Warner	03/16/2017 02:14 PM
Patrick Brama	Patrick Brama	03/16/2017 02:32 PM
Form Started By: MaryJo Warner		Started On: 01/20/2017 10:29 AM
Final Approval Date: 03/16/2017		

**Public Works Committee**

5. 2.

**Meeting Date:** 03/21/2017

**By:** Bruce Westby, Engineering/Public Works

**Title:**

Consider Recommending Council Approval of City Cost Participation for Looped Watermain Connection through Brookfield 8th Addition

**Purpose/Background:**

**Purpose:**

The purpose of this case is to consider recommending City Council approval of City cost participation for a looped watermain connection through Brookfield 8th Addition.

**Background:**

Capstone Homes proposes to construct 25 single family homes along an approximately 1,200 foot long cul-de-sac street in Brookfield 8<sup>th</sup> Addition. This development is in the City's MUSA area and as such is proposed to be served by City water and sanitary sewer. The development plans submitted by Capstone Homes show the 8-inch diameter trunk watermain running through the cul-de-sac and dead-ending at the edge of the plat.

Engineering Staff's plan review comments directed the developer to extend the dead-end watermain line approximately 650 feet through an existing City owned right-of-way corridor to the south and to connect the extended watermain to an existing watermain stub north of 166<sup>th</sup> Avenue. This would provide a looped trunk watermain system which allows water to be drawn from either end of the trunk line which is preferred to dead-end watermain lines for numerous reasons, which are discussed in more detail below.

The developer responded that they can't afford to bear this cost alone, but that they understand the benefits and are agreeable to sharing up to 50% of the costs required to complete this work, to a maximum of \$50,000. The estimated cost to extend and connect the 8-inch trunk watermain line, including approximately 500 feet of directional drilled high-density polyethylene (HDPE) watermain and 150 feet of open trenched cast iron pipe (CIP), through the City owned right-of-way between 166<sup>th</sup> Avenue and Brookfield 8<sup>th</sup> Addition is approximately \$100,000. A 50/50 cost split would therefore result in both parties contributing up to \$50,000 for this work.

This watermain connection was discussed briefly by the City Council on February 28<sup>th</sup>. At the time, Council raised concerns that sharing in costs for directed work could set a precedent whereby future developers may request City cost sharing for watermain extensions and connections when requested by the City. However, Staff believes this situation is unique and would not set a precedent for future developer cost-share requests since the requested watermain extension occurs well outside the plat for Brookfield 8<sup>th</sup> Addition and therefore similar situations are anticipated to be encountered infrequently.

The trunk watermain connection will benefit both the City and the developer so City Staff supports a 50/50 cost-share based on dual benefits.

Benefits to the City due to a looped water supply system include;

1. Improved public safety response due to increased water pressure and flow rates
2. Improved water quality due to increased water pressure and flow rates
3. Ability to isolate (shut off) fewer homes when maintaining watermain
4. Reduced maintenance costs due to minimal watermain flushing needs

Benefits to Capstone Homes due to a looped water supply system include;

1. Ability to obtain Certificates of Occupancy one home at a time (versus obtaining multiple CO's for dead-end watermain)
2. Increased customer satisfaction due to City benefits #1 through #3

Attached is a one-page position sheet provided by Capstone Homes. As noted, if a cost-share agreement is not approved the developer proposes to install a dead-end watermain line. While this would not be ideal due to the potential concerns regarding water quality and public safety noted above, the dead-end 8-inch watermain line would be sufficient to serve the new homes along the cul-de-sac street once a sufficient number of homes are occupied and are using water. This number will depend on the locations of the homes along the dead-end main (to be determined by City Staff as needed).

**Timeframe:**

Staff estimates this case will take 15 minutes to present and respond to questions.

**Observations/Alternatives:**

Capstone Homes would complete the looped watermain connection work as part of their development, and the City would reimburse them for our share of the costs. City Staff will inspect the work and costs will be based on actual construction costs, which will be reviewed and approved by City Staff. Appropriate traffic control will be used as necessary while the work is completed.

Ben Minks with Capstone Homes will be attending to answer questions as needed.

**Funding Source:**

If a cost-share is approved by City Council, Staff will develop a cost-share agreement to be executed between the City and Capstone Homes. The City's share of costs will be funded through the Water Funds.

**Recommendation:**

Since the trunk watermain connection would benefit both the City and the developer, City Staff supports a 50/50 cost-share in an amount not-to-exceed \$50,000.

**Action:**

Recommend City Council approval of sharing in up to 50% of construction costs to connect the watermain from Brookfield 8th Addition to the existing trunk watermain at 166th Avenue at a not to exceed amount of \$50,000.

**Attachments**

Capstone Determination Memo

**Form Review**

<b>Inbox</b>	<b>Reviewed By</b>	<b>Date</b>
Grant Riemer	Grant Riemer	03/16/2017 09:45 AM
Kurt Ulrich	MaryJo Warner	03/16/2017 02:21 PM
Patrick Brama	Patrick Brama	03/16/2017 02:39 PM
Form Started By: Bruce Westby		Started On: 03/07/2017 08:04 AM
Final Approval Date: 03/16/2017		



## Brookfield 8<sup>th</sup> Watermain Loop Determination

Capstone Homes and the City of Ramsey have a longstanding, successful working relationship to provide exceptional homes to the residents of Ramsey. It is our desire to come to an agreeable solution regarding the watermain completion issue that has arisen during the planning process. We appreciate the City's willingness to consider cost sharing this aspect of the project given the long-term benefit that it will bring to the City of Ramsey as well as the residents of Brookfield 8<sup>th</sup>.

In the event that the City of Ramsey determines that it is willing to share cost of the watermain loop extension in the Brookfield 8<sup>th</sup> Addition with Capstone Homes, Capstone Homes would agree to cost share under the following circumstances:

- The cost of the water main loop extension not to exceed \$105,000.00.
- Capstone and the City of Ramsey would each pay 50% of the cost.
- The method of construction is a directional bore, Capstone would oversee the work of the project.

Should the City determine that it is not interested in a cost share option to complete the watermain loop, it will be Capstone Homes' position to dead end the watermain for Brookfield 8<sup>th</sup>. Our engineers have determined that the water quality and safety will not be impacted once 20% buildout has been accomplished for the 25 lots in Brookfield 8<sup>th</sup>.<sup>1</sup>

### How Safe is the Water on Your Dead-Ends?

Insert Information about Your Dead-End(s) Below in the YELLOW Cells to Find Out

<b>Step One:</b> Enter your pipe size in inches (2, 4, 6, 8, 10 or 12)	<b>8</b>	<b>FACTS ABOUT UNCIRCULATING WATER</b> <ul style="list-style-type: none"> <li>EPA recommended minimum disinfectant residual is .5 mg/L (level varies by state)</li> <li>Within 200 hours (8.3 days) disinfectant residuals begin to dissipate and drop</li> <li>Disinfectant byproducts (DBPs) can begin to form within 4-7 days. <span style="color: red;">If the cell t22 is greater than 4, the water may begin to become unsafe for consumers</span></li> <li>Kupferle's EPA Approved Automatic Flushing Systems (AFS) keep residuals consistent and reduce the threat of DBPs forming by removing old water. AFS flush less water more often and help keep water safe for consumers.</li> </ul>
<b>Step Two:</b> Enter the length of your dead-end waterline in miles	<b>0.28</b>	
Total Amount of Water in Pipe (in gallons)	<b>3,860</b>	
<b>Step Three:</b> Enter the # of Service Connections on the waterline*	<b>5</b>	
Amount of Uncirculated Water (in gallons)	<b>2,110</b>	
# of Days to Consume Uncirculated Water (in gallons)	<b>1.2</b>	
Estimated Water Tank Turnover (in days)	<b>2</b>	

Eclipse 9400 Series

Eclipse 9700 Series

Eclipse 9800 Series

**Automatic Flushing Solution** (flushing minutes per day to keep water safe)\*\*

FALSE

\*Avg household uses 350 gallons per day

\*\*based on 150 gpm flow rate

**THE KUPFERLE FOUNDRY COMPANY**  
[www.hydrants.com](http://www.hydrants.com)  
**800-231-3990**

Click on images for more information

<sup>1</sup> <http://hydrants.com/water-quality-calculator>.

**Public Works Committee**

**5.3.**

**Meeting Date:** 03/21/2017

**Submitted For:** John Nelson, Engineering/Public Works

**By:** Grant Riemer, Engineering/Public Works

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**Title:**

Review of Municipal Water System Control and Alarm Systems

**Purpose/Background:**

Utility Supervisor John Nelson will review and demonstrate the capabilities of our SCADA (Supervisory Control and Data Acquisition) system with the PW Committee.

**Timeframe:**

15-20 Minutes

**Observations/Alternatives:**

The SCADA system is the computer program that controls all of our water towers, municipal wells and sanitary sewer lift stations. It also sends out alarms for all these systems, at pre determined set points, to warn our maintenance staff of system failures. Mr. Nelson will cover the basics of the SCADA system, including the different ways we can monitor our infrastructure, what will trigger an alarm and how we respond.

**Funding Source:**

NA

**Recommendation:**

This case is for informational purposes only

**Action:**

None needed. Informational only

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**Attachments**

*No file(s) attached.*

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**Form Review**

<b>Inbox</b>	<b>Reviewed By</b>	<b>Date</b>
Kurt Ulrich	MaryJo Warner	03/16/2017 02:24 PM
Patrick Brama	Patrick Brama	03/16/2017 02:43 PM
Form Started By: Grant Riemer		Started On: 03/14/2017 06:11 PM
Final Approval Date: 03/16/2017		

**Public Works Committee**

5. 4.

**Meeting Date:** 03/21/2017

**Submitted For:** Grant Riemer, Engineering/Public Works

**By:** Grant Riemer, Engineering/Public Works

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**Title:**

Authorize Professional Services for Design and Installation of Emergency Generator at Well House # 3

**Purpose/Background:**

**PURPOSE**

1. Consider authorizing work outlined in attached RFP for Design and Installation of an Emergency Generator at Well # 3 located at 7301 Bunker Lake Blvd.

**BACKGROUND**

2. Currently the City has a backup generator that operates well # 5, if there were to be an extended power outage. Well # 5 is capable of producing 850 gallons per minute (GPM). Our average consumption rate is 1120 GPM, so at present time our emergency back up well will not keep pace with our demand. The emergency generator for well # 3 is currently listed in our CIP as # 16-WTR-00, that project sheet is attached to this case. The estimated cost for the design, purchase and installation of the emergency generator \$115,000. City staff requested RFP's from three of the engineering firms in our engineering consultant pool. Those firms were Bolton & Menk Inc., SEH Inc and WSB and Associates. The Request for Proposals was also posted in the Anoka Union the weeks of February 24th and March 3rd. The city received two proposals, one from SEH Inc and the other from, Bolton & Menk Inc. The SEH Inc. proposal came in at \$15,000.00, and the Bolton and Menk Inc. proposal was \$11,310.00.

**Timeframe:**

10-15 Minutes

**Observations/Alternatives:**

Well # 3 can produce 1600 GPM, so combined with well # 5 we would be able to produce 2450 GPM and keep pace with our daily demand over a long power outage. With well # 3 online we would be better prepared to provide two of our most basic services to our residents, drinking water and fire protection.

**Funding Source:**

Utilities Fund

**Recommendation:**

Staff recommendation is to enter into a contract with Bolton & Menk Inc. to provide design and construction management for the installation of an emergency backup natural gas generator for Well # 3 for a not to exceed amount of \$11,310.00

**Action:**

Motion to accept staff recommendation to enter into a contract with Bolton & Menk Inc. to provide design and construction management for the installation of an emergency backup natural gas generator for Well # 3 for a not to exceed amount of \$11,310.00 or reject staff recommendation and accept alternate recommendation based on committee discussion.

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IP-1706 RFP

SEH RFP

Bolten and Menk RFP

CIP Project Sheet

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### Form Review

**Inbox**

Kurt Ulrich

Patrick Brama

Form Started By: Grant Riemer

Final Approval Date: 03/16/2017

**Reviewed By**

MaryJo Warner

Patrick Brama

**Date**

03/16/2017 02:20 PM

03/16/2017 02:34 PM

Started On: 02/16/2017 01:42 PM

January 24, 2017

**REQUEST FOR PROPOSAL**  
**Improvement Project #17-06**  
**Well House #3 Natural Gas Generator**

**INTRODUCTION:** The City of Ramsey (City) is requesting proposals (RFP) for completing final design, preparing documents needed to obtain RFP's, and managing the RFP process related to furnishing and installing a natural gas emergency standby generator ("the WORK") at Well House # 3 located at 7301 Bunker Lake Blvd, Ramsey Minnesota 55303. The scope of the WORK includes:

- Perform comprehensive generator sizing calculations for natural gas standby generator. Contact vendors to verify sizing, cost and mounting pad foot print
- Prepare contract documents for new standby generator containing design drawings and electrical specifications
- Provide engineers estimate for cost of project
- Assist City with advertising for RFP's from three qualified contractors for two consecutive weeks using the City's official newspaper
- Respond to questions from prospective contractors
- Issue addenda for project documents as needed
- Review submitted RFP's and provide recommendation
- Attend the pre-construction meeting
- Review shop drawings
- Respond to requests for information
- Perform inspections and witness tests during construction as needed
- Assist with review of contractors applications for payments
- Review O and M manuals
- Assist city in preparing punch list
- Perform final inspection and testing of generator operation and installation
- **REQUEST FOR PROPOSAL SUBMITTAL:** A lump sum amount shall be submitted for the proposed WORK using the form at the end of this REQUEST FOR PROPOSAL.
- **COMMUNICATION WITH THE CITY:** If any requirements of this RFP are not clearly understood, the Contractor is responsible for contacting the City for further clarification in a prompt manner. Responses to inquiries, if they change or clarify the RFP in a substantial manner, will be forwarded by addenda to the RFP.

**SUBMISSION:** A signed copy of the attached RFP form is requested by **the City of Ramsey**. Deliver to the Ramsey Municipal Center, 7550 Sunwood Drive NW, Ramsey, MN 55303, to the attention of Grant Riemer Public Works Superintendent. Faxed or e-mail proposals will not be accepted. **PROPOSAL UNDERSTANDING:** By submitting a proposal, the Proposer agrees to be bound to the terms and conditions herein.

January 24, 2017

**REQUEST FOR PROPOSAL**  
**Improvement Project #17-06**  
**Well House #3 Natural Gas Generator**

**COSTS OF PREPARATION:** Under no conditions will any costs of preparation of the proposal be reimbursed by the City.

**PROPOSAL**

I hereby accept the terms and conditions herein and agree to complete all WORK described herein in the lump sum not-to-exceed amount of \$\_\_\_\_\_.

Proposer \_\_\_\_\_  
Owner or representative \_\_\_\_\_  
Phone(s) \_\_\_\_\_  
Fax \_\_\_\_\_  
E-mail \_\_\_\_\_  
Signature \_\_\_\_\_  
Date \_\_\_\_\_

## Agreement for Professional Services

This Agreement made on the 21<sup>th</sup> day of October, 2016, between City of Ramsey (hereinafter “City”) and Short Elliott Hendrickson Inc. (hereinafter “Consultant”).

This Agreement authorizes and describes the scope, schedule, and payment conditions for Consultant’s work on the Project titled Well House 3 Standby Generator Design, generally described as the engineering design and support for the addition of a permanently installed standby generator to Well House No. 3. The project is divided into three phases for the Design, Quotation, and Construction of this work.

**Scope:** The Basic Services to be provided by Consultant as set forth herein is provided subject to the attached General Conditions of the Agreement for Professional Services (General Conditions Rev. 07.14.16), which is incorporated by reference herein and subject to Exhibits attached to this Agreement.

### Phase 1 – Design Phase

- Complete generator sizing calculation for standby natural gas generator. Contact vendors to verify sizing, cost of unit and preliminary foot print.
- Prepare construction documents for new standby generator consisting of drawings and electrical specifications
- Prepare opinion of probable cost for the installation of the standby generator.

### Phase 2 – Quotation Phase

- Assist the City in obtaining quotations from a minimum of three (3) qualified contractors
- Respond to questions from prospective contractors
- Issue necessary addenda to Project Construction Documents
- Review submitted quotes and provide recommendations to the City
- Assist the City in the award of the Project

### Phase 3 – Construction Phase

- Set-up and attend a pre-construction meeting
- Provide review of Shop Drawings
- Respond to RFIs submitted
- Review Contractor’s Applications for Payment
- Review of Operation & Maintenance Manuals
- Attend generator test
- Prepare a Punch List
- Perform final inspection

**Services Provided by the City:** The City shall provide the Consultant with the following services:

- Provide drawings of the existing facilities

**Schedule:** The anticipated schedule for the completion of work described in the scope is described below:

Action Item	Scheduled Date
Commence Design	Upon approval of proposal
Prepare construction documents and Opinion of Probable Cost	Within five weeks of approval of proposal
Receive quotations from contractor	Within nine weeks of approval of proposal
Award contract	Within twelve weeks of approval of proposal
Construction:	
Project Close-Out	Within five months of award of contract

**Compensation for Services:** The fees for each phase have been determined and are described below:

Phase 1 Engineering Fees: The Consultant shall complete Phase 1 – Design efforts on an hourly basis for a Not-to-Exceed Fee of \$8,800, which includes reimbursable expenses.

Phase 2 Engineering Fees: The Consultant shall complete Phase 2 – Quotation Assistance efforts on an hourly basis for a Not-to-Exceed Fee of \$2,200, which includes reimbursable expenses.

Phase 3 Construction Administration & Observation Engineering Fees: The Consultant shall complete Phase 3 – Construction on an hourly basis for a Not-to-Exceed Fee of \$4,000, which includes reimbursable expenses

This Agreement for Professional Services, attached General Conditions, Exhibits and any Attachments (collectively referred to as the “Agreement”) supersedes all prior contemporaneous oral or written agreements and represents the entire understanding between Client and Consultant with respect to the services to be provided by Consultant hereunder. In the event of a conflict between the documents, this document and the attached General Conditions shall take precedence over all other Exhibits unless noted below under “Other Terms and Conditions”. The Agreement for Professional Services and the General Conditions (including scope, schedule, fee and signatures) shall take precedence over attached Exhibits. This Agreement may not be amended except by written agreement signed by the authorized representatives of each party.

c:\users\bweiss\desktop\agreement - city of ramsey - well house 3 standby generator.docx

**Short Elliott Hendrickson Inc.**

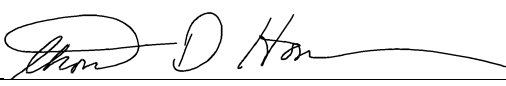
**City of Ramsey**

By:  \_\_\_\_\_

By: \_\_\_\_\_

Title: Miles B. Jensen, PE  
Principal | Regional Practice Center Leader

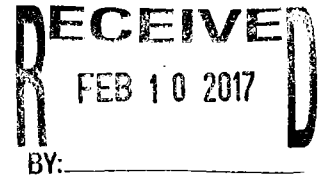
Title: John Nelson  
Utilities Supervisor

By:  \_\_\_\_\_

Title: Thomas Honer, PE  
Sr. Professional Engineer II

January 27, 2017


**REQUEST FOR PROPOSAL  
Improvement Project #17-06  
Well House #3 Natural Gas Generator**



**COSTS OF PREPARATION:** Under no conditions will any costs of preparation of the proposal be reimbursed by the City.

**PROPOSAL**

I hereby accept the terms and conditions herein and agree to complete all WORK described herein in the lump sum not-to-exceed amount of \$11,310.00.

Proposer	<u>Bolton &amp; Menk, Inc.</u>
Owner or representative	<u>Kevin Kielb, P.E.</u>
Phone(s)	<u>(651) 968-7760</u>
Fax	<u>(763) 427-0833</u>
E-mail	<u>Kevinki@Bolton-Menk.com</u>
Signature	<u></u>
Date	<u>February 10, 2017</u>

**Notes:**

The above fees include \$750.00 for the analysis and design of natural gas requirements to serve the generator. This information is typically required by Connexus Energy prior to service installation.

All other requirements as listed in the January 27, 2017 Request for Proposals are included in the fees above.

Department: Water Utility

Contact

Type: Improvement

Useful Life

Category: Water Utility Improvement

Priority: 1-Existing Obligation (High)

Status: Active

Total Cost: \$115,000

Project #: 16-WTR-001

Project Name: Emergency Power Supply for Well #3

**Description**

Purchase and install a back up generator for Pumphouse #2, 7301 Bunker Lake Blvd. The generator is 150 KW 480 Volt, 3 phase 60 Hz 1800 rpm.

**Justification**

Currently the City has a backup generator on one well that has the ability to produce 850 gallons per minute (gpm). Our average consumption rate is 1,120 gpm. In the event of a power failure our well cannot keep pace with demand. Well #3 can produce 1,600 gpm so with both wells running we will be able to produce 2,450 gpm, thus able to keep up with demand during a long power outage.

This project includes running a natural gas service to the well house to supply fuel for the generator. The project will also include SCADA upgrades for the site.

Expenditures	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
Improvements Other than Building Cost	115,000										115,000
<b>Total</b>	<b>115,000</b>										<b>115,000</b>
<b>Funding Sources</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>Total</b>
Water Utility Fund	115,000										115,000
<b>Total</b>	<b>115,000</b>										<b>115,000</b>

**Public Works Committee**

5. 5.

**Meeting Date:** 03/21/2017

**By:** Bruce Westby, Engineering/Public Works

**Title:**

Consider Recommending City Council Approval for Speed Zone Study on Sunfish Lake Boulevard

**Purpose/Background:**

On Monday, March 13th, the Anoka County Highway Department received a call from a resident that lives on Sunfish Lake Boulevard in the area of 155th Avenue with a complaint about excessive speeds on Sunfish Lake Boulevard. The posted speed limit on this section of Sunfish Lake Blvd is 55 mph, which was set in 1975 by MnDOT based on the results of a speed zone study. Since it has been more than 40 years since the speed zone study was completed, and since development in this area of the City has increased significantly since then, Anoka County contacted City staff to ask if the City would like a new speed study performed on Sunfish Lake Boulevard.

According to Anoka County, MnDOT requires that speed zone studies be performed on segments of roads not less than one-mile in length, and that reasonable study limits be used, such as between intersecting streets. City staff would therefore recommend that the limits of the study be between Bunker Lake Boulevard/CSAH 116, where the posted speed limit on Sunfish Lake Boulevard changes to 45 mph, and Nowthen Boulevard/CSAH 5 where Sunfish Lake Boulevard terminates.

In order to potentially change the speed limit on Sunfish Lake Boulevard, a traffic and engineering investigation known as a Speed Zone Study needs to be completed. Speed Zone Studies are completed through MnDOT, and the factors that are considered include the roadway type and condition, the location and type of access points and types of development along the route, the existing traffic control devices, the crash history, existing traffic volumes, and the available sight distance along the route, along with radar speed samples from traffic traveling on the route during various times of the day. Using engineering judgment, MnDOT evaluates these factors, and determines the 85th percentile speed (the point at which 85% of the drivers on the route are driving under). Experience has shown that a posted speed limit near this 85% value is the speed limit that a roadway should be signed at. Once a Speed Zone Study has been completed, it is then formally authorized by the State Commissioner of Transportation, and once authorized, the road authority implements the new speed zone by installing the speed limit signs.

Because the Ramsey Police Department is responsible for the enforcement of the speed limit of Sunfish Lake Boulevard, the City needs to send a written request to Anoka County Highway for a Speed Zone Study to initiate the process. The existing speed limit of 55 mph is already at the maximum speed for this type of road, so there is no risk that the speed limit would be increased.

**Timeframe:**

Staff estimates this case will take 5 minutes to present and discuss.

**Observations/Alternatives:**

NA

**Funding Source:**

There is no cost to the City associated with this request, other than Staff time.

**Recommendation:**

City staff supports conducting a new speed zone study and recommends that the Public Works Committee recommend Council approval of the study. If the Committee recommends Council approval, and if Council ratifies the Committees recommendation, staff will work with Anoka County Highway staff to order the study immediately. In the meantime, Ramsey Police Department proposes to increase enforcement of posted speeds in this area.

**Action:**

Recommend City Council approval to request a Speed Zone Study be completed on Sunfish Lake Boulevard between Bunker Lake Boulevard/CSAH 116 and Nowthen Boulevard/CSAH 5.

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**Attachments**

*No file(s) attached.*

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**Form Review**

<b>Inbox</b>	<b>Reviewed By</b>	<b>Date</b>
Grant Riemer	Grant Riemer	03/16/2017 10:38 AM
Kurt Ulrich	MaryJo Warner	03/16/2017 02:25 PM
Patrick Brama	Patrick Brama	03/16/2017 02:46 PM
Form Started By: Bruce Westby		Started On: 03/15/2017 03:58 PM
Final Approval Date: 03/16/2017		

**Public Works Committee**

6. 1.

**Meeting Date:** 03/21/2017

**By:** Bruce Westby, Engineering/Public Works

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**Title:**

Review of Rivers Bend Street Reconstruction Assessments

**Purpose/Background:**

**Purpose:**

The purpose of this case is to review the proposed assessments for the proposed 2018 Rivers Bend Street Reconstruction project pursuant to the request of Councilmember Riley.

**Background:**

The following streets in the Rivers Bend development are proposed to be reconstructed in 2018.

- 147th Lane – Xkimo Street to Waco Street
- 148th Avenue – Yakima Street to Xkimo Street
- Xkimo Street – 147th Lane to 149th Avenue
- Yakima Street – 148th Avenue to 149th Avenue

A Feasibility Report was prepared by Staff for the proposed improvements and was accepted by the City Council on January 24, 2017. A copy of the report is attached. As noted in the report, the City of Ramsey’s Special Assessments Policy allows 25% of street reconstruction project costs to be assessed against benefiting properties. Staff therefore developed an assessment program for the proposed improvements based on this assessment potential.

When the Feasibility Report was accepted by Council on January 24, 2017, Councilmember Riley suggested to bring that topic back to the Public Works Committee for further discussion, specific to something unique in this instance compared to the assessment policy as a whole.

**Timeframe:**

Staff estimates this case will take 15 minutes to present and discuss.

**Observations/Alternatives:**

NA

**Funding Source:**

Per the attached Feasibility Report, the engineer’s opinion of probable project costs for the project is \$283,000. A total of 44 residential parcels will benefit from the proposed improvements and are preliminarily proposed to be assessed for 25 percent of eligible project costs which totals \$70,752. This equates to preliminary assessments of \$1,608 per parcel. The City will fund the remaining 75% of project costs, which total \$212,248. These costs will be funded using Street Reconstruction and Overlay Program bond funds, as well as a small amount of Stormwater Utility Funds.

**Recommendation:**

Staff recommends moving forward with the preliminary assessments as shown in the attached Feasibility Report to allow staff to begin meeting with property owners to discuss the proposed improvements, which are proposed to be constructed as part of the 2018 Street Maintenance Program.

**Action:**

No action is need at this time. Final assessments will not be adopted by Council until the fall of 2018, after work is complete.

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### **Attachments**

IP 17-02 Feas Report

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### **Form Review**

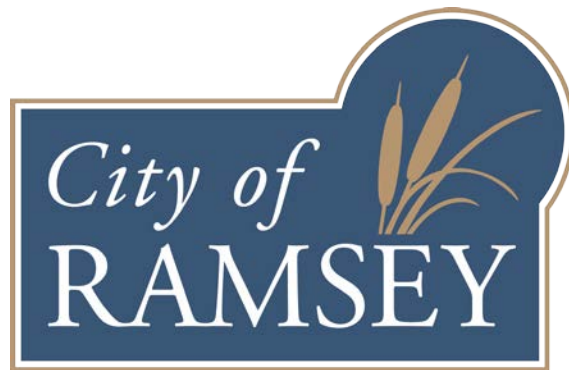
<b>Inbox</b>	<b>Reviewed By</b>	<b>Date</b>
Grant Riemer	Grant Riemer	03/16/2017 12:24 PM
Kurt Ulrich	MaryJo Warner	03/16/2017 02:23 PM
Patrick Brama	Patrick Brama	03/16/2017 02:43 PM
Form Started By: Bruce Westby		Started On: 03/09/2017 03:21 PM
Final Approval Date: 03/16/2017		

# FEASIBILITY REPORT

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## RIVERS BEND STREET RECONSTRUCTIONS

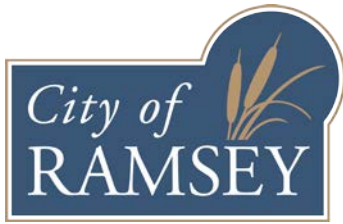
### CITY IMPROVEMENT PROJECT NO. 17-02



**January 19, 2017**

**Prepared By:**

**City of Ramsey  
Engineering Department  
7550 Rivers Bend  
Ramsey, MN 55303  
763-433-9820  
763-433-9848 (Fax)**



January 19, 2017

Honorable Mayor and City Council  
City of Ramsey  
7550 Rivers Bend  
Ramsey, MN 55303

Re: Feasibility Report - City of Ramsey Improvement Project #17-02  
Rivers Bend Street Reconstructions

Dear Mayor and City Council Members:

Transmitted herewith is a Feasibility Report for the proposed Rivers Bend Street Reconstructions project which examines the feasibility of reconstructing the bituminous street section and completing other appurtenant improvements.

This Feasibility Report examines the scope of the proposed improvements, explores estimated costs and available funding sources, defines a preliminary project schedule, and determines the necessity, feasibility and general cost-effectiveness of the proposed improvements, including any alternate designs, as well as whether the improvements would best be completed separately or in conjunction with another project.

I would be happy to discuss this report with you at your convenience. Please feel free to contact me at 763-433-9825 or [bwestby@cityoframsey.com](mailto:bwestby@cityoframsey.com) with any questions.

Sincerely,

*City of Ramsey*

Bruce Westby, PE  
City Engineer

Enclosure

C: Kurt Ulrich, City Administrator  
Diana Lund, Finance Director  
Grant Reimer, Public Works Superintendent  
Leonard Linton, Civil Engineer IV

## CERTIFICATION

---

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

---

Bruce Westby, PE

Date: January 19, 2017

License No. 40116

I hereby certify that this plan, specification or report was reviewed for Quality Control and Quality Assurance purposes and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

---

Leonard Linton, PE

Date: January 19, 2017

License No. 21112

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**TITLE SHEET**

**LETTER OF TRANSMITTAL**

**CERTIFICATION SHEET**

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### **Appendix A**

Figure 1 – Project Scope  
Figure 2 – Typical Section  
Project Site Pictures

### **Appendix B**

Opinion of Probable Costs

### **Appendix C**

Preliminary Assessment Map  
Preliminary Assessment Roll

### **Appendix D**

Pavement Evaluations and Recommendations (WSB & Associates – 11 pages)

## 1. EXECUTIVE SUMMARY

City Improvement Project 17-02 proposes to reconstruct four street segments within the Rivers Bend residential neighborhood including 147th Lane between Xkimo Street and Waco Street, 148th Avenue between Yakima Street and Xkimo Street, Xkimo Street between 147th Lane and 149th Avenue, and Yakima Street between 148th Avenue and 149th Avenue. These streets total approximately 2,774 linear feet (0.53 miles) in length. A map showing the location and scope of the proposed improvements is included as *Figure 1* in *Appendix A*.

These street segments in the Rivers Bend neighborhood were constructed in 1985 with between 2 inches and 3.25 inches of bituminous pavement, 4 inches class 5 aggregate base, surmountable concrete curb and gutter, and concrete storm sewer. The street was constructed to a width of 30 feet from face-of-curb to face-of-curb, and is centered within a 60 foot wide right-of-way. The storm sewer system consists of catch basins which drain runoff from the street to low-lying areas using concrete storm sewer pipes.

City staff evaluates and rates the condition of pavement sections on all city streets on an annual basis using the Pavement and Surface Evaluation Rating (PASER) system. In the fall of 2016, these street segments within the Rivers Bend neighborhood were rated with PASER ratings of 3, which indicates this street is past the point of applying mill and overlay improvements. The current condition of these streets requires City staff to patch the streets at least once per year, particularly before winter so the street can be plowed without further damaging the pavement in the process. Pictures of this street segment are located in *Appendix A*.

Proposed improvements include removing and replacing all damaged concrete curb and gutter sections, and reconstructing the existing bituminous pavement section using a process called Full Depth Reclamation, or FDR. For this project, the FDR process would involve milling the entire existing bituminous pavement section, along with about 1 inch of the existing aggregate base. This reclaim material would then be placed on top of the reshaped and compacted subgrade, after which 3.5 inches of bituminous pavement would be placed on top. This would result in a 7-ton pavement design, which is a typical design for residential streets.

The existing storm sewer system is in good condition. Only casting adjustments are proposed.

The engineer's opinion of probable costs for completing the proposed improvements on Rivers Bend as outlined in this report is \$283,000. Estimated costs include 23% indirect costs for administrative, engineering, finance and legal costs. A summary of the engineer's opinion of probable costs is included in *Appendix B*.

A total of 44 parcels have been identified as receiving special benefit from the improvements. These parcels are identified in the preliminary Assessment Map and Roll which are attached in *Appendix C*.

A total of twelve pavement corings were completed by WSB and Associates (WSB) to assist with the preparation of this report. WSB offered pavement design recommendations which were considered and incorporated to varying degrees while preparing this report. A copy of WSB's report is attached in *Appendix D*.

This improvement project, which is listed in the City's current Capital Improvement Program, is proposed to be funded using a combination of special assessments to benefiting properties, street reconstructions bond proceeds, and stormwater utility funds.

Staff recommends using special assessments to pay for 25% of eligible improvement costs, which will be applied across 44 assessable properties using the "per lot" method of assessment, which is the typical method used for single family parcels having approximately the same size. All costs for this project are eligible for special assessments since the street is proposed to be reconstructed at its existing width, and since the existing and proposed pavement sections both meet 7-ton design standards meaning they are equivalent sections. This project does not include any ineligible project costs related to the use of special assessments.

Staff recommends ordering a special benefit consultation report for this project to verify that the proposed assessment amounts will not exceed the amount of benefit to any of these properties. If the report concludes that the benefit to any of the properties is less than the proposed preliminary assessment rate, Staff would propose to lower the assessment rate accordingly at the Assessment Hearing. However, if the special benefit consultation report verifies that the assessment rates as proposed are justified, Staff would propose to adopt the final assessment roll using the rate as preliminarily proposed.

Staff has not yet had an opportunity to discuss the proposed improvements or the use of special assessments to pay for a portion of the improvements with impacted property owners. However, prior to the Public Hearing Staff will contact and offer to meet with impacted property owners for the purpose of explaining the proposed improvements, how special assessments are proposed to be applied, and to discuss the proposed improvements in more detail and to gather their input on the project, including any information that should be explored in more detail during development of plans and specifications. Staff would then present this information to Council during the Public Hearing.

This project is necessary, feasible, and cost-effective from an engineering standpoint, and can be constructed as proposed herein. However, it would be most cost-effective to construct this project in conjunction with the Stanhope Terrace Street Reconstructions project, which is currently scheduled for construction in 2018.

## **2. INTRODUCTION**

### **2.1 Authorization**

The preparation of this report was authorized by the Ramsey City Council on January 10th, 2017. This project has been designated as City Improvement Project No. 17-02.

### **2.2 Program Overview**

In support of the City's long-term Street Maintenance Program, the existing bituminous pavement section is proposed to be reconstructed, damaged concrete curb and gutter sections will be removed and replaced, and other appurtenant work will be completed as outlined in this report.

The City's pavement evaluation process involves a visual evaluation of each street's pavement surface based on the type, extent and severity of each pavement distress observed. Numerous types of pavement distresses may exist within a pavement section including, but not limited to, alligator cracking, block cracking, longitudinal cracking, transverse cracking, rutting, raveling, shoving, potholes and patches. This field data is then used to rate the pavement condition.

The City uses the Pavement and Surface Evaluation Rating (PASER) system to rate pavement condition. A PASER rating is a numerical index between 1 and 10 indicating the condition of a pavement based on the various pavement distresses recorded during visual observations. A PASER rating of 10 represents brand new pavement, while a PASER rating of 1 represents a pavement section that has fallen into complete disrepair requiring full street reconstructions.

In the fall of 2016, these street segments in the Rivers Bend neighborhood were rated with PASER ratings of 3.

### **2.3 Scope**

City of Ramsey Improvement Project 17-02 proposes to reconstruct the existing bituminous pavement, to remove and replace damaged concrete curb and gutter sections, and to complete other appurtenant work on four street segments within the Rivers Bend residential neighborhood including 147th Lane between Xkimo Street and Waco Street, 148th Avenue between Yakima Street and Xkimo Street, Xkimo Street between 147th Lane and 149th Avenue, and Yakima Street between 148th Avenue and 149th Avenue. These street segments total approximately 2,774 linear feet (0.53 miles) in length.

The existing bituminous pavement is proposed to be reconstructed by removing the existing pavement and disposing of it off-site. The existing class 5 aggregate base would then be reshaped and compacted, and then 3.5 inches of new bituminous pavement would be placed on top. This would result in a 7-ton pavement design per the City's typical residential street design.

A map showing the location and scope of the proposed improvements is included as **Figure 1** in **Appendix A**.

### **3. EXISTING CONDITIONS**

#### **3.1 Existing Pavement and Soil Conditions**

The four street segments were constructed in 1985 with 2 to 3.5 inches of bituminous pavement, 4 inches class 5 aggregate base, B618 concrete curb and gutter, and concrete storm sewer. The street was constructed to a width of 40 feet from face-of-curb to face-of-curb, and is centered within an 80 foot wide right-of-way. Delineated parking lanes exist along both sides of the street. The existing posted speed is 35 mph along this entire segment of Rivers Bend. The storm sewer system consists of numerous catch basins which drain runoff from the street to adjacent low-lying areas using concrete storm sewer pipes.

The pavement was cracksealed and sealcoated in 1988 and 1995, and spot patching has been applied on an as-needed basis since. In 2016, Staff observed Pavement and Surface Evaluation Ratings (PASER) of 3 on all street segments.

While truck counts for these streets are not available, Staff believes it is reasonable to assume the average annual daily traffic (AADT) count is less than 1,000 vehicles, and that less than 5 percent of vehicles using these streets can be classified as truck traffic.

WSB and Associates (WSB) was employed to complete a total of twelve pavement corings. Their results showed an average bituminous pavement thickness between 2 and 3.25 inches, which was constructed over 4 inches class 5 aggregate base.

#### **3.2 Watermain**

Watermain was installed under all street segments in Rivers Bend. Staff believes the existing watermain is in good condition, and that no repairs will be required prior to reconstructing the pavement. However, if plans and specifications are ordered for the proposed improvements, staff proposes to hire a leak detection expert to ensure there are no detectable leaks. If leaks are detected, repairs would be made under separate contract before work commences on this project. Leak detection testing is estimated to cost \$500.

#### **3.3 Sanitary Sewer**

Sanitary sewer was installed under each of the street segments in Rivers Bend. Staff believes the existing sanitary sewer is in good condition, and that no repairs will be required prior to reconstructing the pavement. However, if plans and specifications are ordered for the proposed improvements, staff proposes to hire a firm to televise the sewer to ensure the pipes are not deformed, cracked, or broken, and that all joints are sealed. If any issues are detected, repairs would be made under separate contract before work commences on this project. Sewer televising for this project is estimated to cost \$2,800.

#### **3.4 Storm Sewer/Drainage**

Storm sewer exists along Xkimo Street. Based on design calculations completed by City staff, no modifications will be required to the existing storm sewer system.

## **3.5 Streets**

### ***3.5.1 Existing Typical Sections***

The street was constructed to a width of 30 feet from face-of-curb to face-of-curb, and is centered within a 60 foot wide City-owned right-of-way.

### ***3.5.2 Maintenance History***

The pavement was cracksealed and sealcoated in 1988, and again in 1995. Spot patching has been applied on an as-needed basis since.

## **3.6 Land Use**

Properties in the Rivers Bend neighborhood are zoned single family residential.

## **4. PROPOSED IMPROVEMENTS**

### **4.1 Street and Stormwater Improvements**

The four street segments within the Rivers Bend residential neighborhood proposed to be reconstructed include 147th Lane between Xkimo Street and Waco Street, 148th Avenue between Yakima Street and Xkimo Street, Xkimo Street between 147th Lane and 149th Avenue, and Yakima Street between 148th Avenue and 149th Avenue.

The scope of the proposed surface improvements is shown in *Figure 1* in *Appendix A*.

#### ***4.1.1 Street Improvements***

The streets in Rivers Bend are proposed to be reconstructed to match their existing width of 30 feet. All damaged surmountable concrete curb and gutter is proposed to be removed and replaced in kind. A typical section for the proposed pavement street reconstructions improvements is shown in *Figure 2* in *Appendix A*.

The proposed reconstructed bituminous pavement design is designed to accommodate a 7-ton design in accordance with the City of Ramsey's design standards. City staff is proposing a pavement section design of 1.5 inches bituminous wear course, 2 inches bituminous base course, over 4 inches of existing aggregate base material after reshaping and compacting the base.

The proposed pavement design should result in a minimum pavement life of 30 years, assuming that proactive, regular pavement maintenance treatments are performed during the life of the pavement. While a 60-year design life would typically be targeted for a reconstructed street, this project is not proposing a full street reconstruction due to the good condition of the majority of the existing 30 year old curb and gutter. Therefore, only the bituminous pavement is proposed to be reconstructed at this time as it may make sense to replace the pavement section at the time the rest of the existing curb and gutter is replaced, which may be 30 or more years in the future.

#### ***4.1.2 Stormsewer Improvements***

The existing storm sewer system is in good condition and is not proposed to be improved. The only proposed storm sewer improvements include repairing catch basin castings as needed. No stormwater quality treatment improvements are required for this project since the street is proposed to be reconstructed at its current width.

#### ***4.1.3 Geotechnical Considerations***

WSB completed twelve (12) pavement cores along the streets in Rivers Bend as shown in their Pavement Evaluations and Recommendations report, attached in *Appendix D*. WSB recommends leaving all intact existing curb and gutter in place, which staff estimates accounts for over 80% of the existing curb and gutter, which is only 30 years old. WSB also recommends reconstructing only the bituminous pavement. In total, this work is estimated to cost about half as much as a total street reconstructions while resulting in a

pavement design life of 30-plus years. In considering that the remaining curb and gutter will likely need to be replaced in around 30 years, a total street reconstructions could be evaluated at that time. Another benefit to this design is that it would result in minimal impacts to site access and traffic during construction.

#### **4.1.4 Other Considerations**

##### Driveways:

Existing driveways will need to be reconstructed to varying degrees. The limits of construction will vary with each driveway based on the elevations of the street and the parking lot, as well as the driveway pavement type. During design, staff will evaluate the construction limits for each driveway and will incorporate this into the plans, but as with all street reconstruction projects the exact limits of construction will be determined in the field during construction. Right-of-entry forms would be obtained from private property owners if work is required outside City right-of-ways and easements.

##### Irrigation Systems:

Developed properties along the project corridor may have private irrigation systems. Impacts to these systems may occur where the existing curb and gutter is being replaced. On past street reconstruction projects, the City repaired private irrigation systems that were damaged as part of the project. Staff recommends foregoing this practice on future projects. Instead, staff recommends notifying property owners in writing of the pending construction as far in advance of construction as possible to allow them to move their irrigation systems out of the construction area, and then replace it once work is complete.

##### Parking Restrictions:

Parking is currently allowed along both sides of the streets except for overnight parking per City code. During this project, parking is proposed to be restricted during allowable working hours also.

#### **4.2 Stormwater Treatment**

Stormwater retention and/or treatment improvements are not required for this project.

#### **4.3 Water Main Improvements**

No watermain improvements are proposed with this project.

#### **4.4 Sanitary Sewer Improvements**

No sanitary sewer improvements are proposed with this project.

#### **4.5 Construction Methods**

The existing bituminous pavement section will be reconstructed as outlined within this report.

#### **4.6 Private Utilities**

Staff has not yet met with the telephone, gas, power and cable utilities regarding this project. During preparation of plans and specifications, staff will meet with the private utility companies to discuss the proposed improvements as noted in the project schedule within this report. The alignment and footprint of the streets will be considered to minimize impacts to private utilities. No impacts to power poles or street lights are anticipated with this project.

Should any utility company indicate they wish to upgrade, replace and/or otherwise modify their services during this project, any such upgrades, replacements and/or modifications will be at the sole discretion and cost of the utility company.

#### **4.7 Permits**

Permits that are anticipated to be required as part of the proposed improvements include:

- MPCA General Stormwater Permit (NPDES)..... Grading and Storm Water

A stormwater permit from the Lower Rum River Watershed Management Organization will not be required with this project.

#### **4.8 Right-of-Ways/Easements**

It is anticipated that all improvements will occur within existing City right-of-ways and/or easements, with the possible exception of tying into private driveways and yards. It is therefore not anticipated that the City will need to acquire additional permanent right-of-way or easements for this project. As such, costs for right-of-way or easement acquisitions are not included in the probable project costs.

City staff will obtain any required right of entries.

## **5. FINANCING**

### **5.1 Opinion of Cost**

A detailed opinion of probable costs for the proposed improvements can be found in *Appendix B* of this report. The opinion of probable costs incorporates anticipated 2017 construction costs for the proposed improvements plus 23% indirect costs for administrative, engineering, financing and legal costs. Construction contingency costs are not included in the estimated costs.

City staff prepared the Feasibility Report in-house as part of staff's normal duties.

WSB and Associates, Inc. prepared their Pavement Evaluations and Recommendations report, which is included in *Appendix D*, at a not-to-exceed cost of \$3,290.

### **5.2 Funding**

#### *5.2.1 Assessments*

The City's adopted Special Assessments Policy allows special assessments in an amount not to exceed 25% of eligible street reconstruction project costs to be levied against benefiting properties. Eligible project costs include costs required to reconstruct the street at its current width, and to reconstruct the pavement without increasing its structural capacity. Benefiting properties are considered to be any parcel that has their primary access onto any of the street segments being reconstructed. A total of 44 benefiting properties have been identified for this project. The Preliminary Assessment Map and Roll are included in *Appendix C*.

The engineer's opinion of probable costs for eligible assessment costs totals \$283,000. Assessable residential parcels are preliminarily proposed to be assessed for 25 percent of eligible project costs, which totals \$70,752 and equals \$1,608 per parcel. Assessment terms are proposed at ten years. Interest rates are proposed at two percent above the bond interest rate.

The "per lot" method of assessment identified in the City of Ramsey's Special Assessments Policy is proposed to be used to calculate assessments for this project. Properties which have their primary access onto one of the reconstructed streets are proposed to be assessed.

Special assessments have not been utilized widely in recent years for street reconstruction projects in Ramsey. In addition, State Statute and the City Charter do not allow for assessments to exceed the benefit to the property. Therefore, Staff may want to ensure that all assessments applied with this project will not exceed the benefit to assessed properties and may therefore request Council authorization to order a benefit appraisal consultation report for this project in accordance with the City's Special Assessments Policy at the time a construction contract is awarded.

### 5.2.2 City Contribution

The City contribution to the project will include all funding in excess of the amount collected through special assessments to benefiting properties which equals 75 percent of eligible project costs. No funds have been budgeted for this project.

The City's share of eligible project costs related to surface (street) improvements is proposed to come from the previously encumbered 5-year Street Reconstruction and Overlay Program bonds. Stormwater Utility Funds are proposed to pay for all storm sewer improvements.

Special assessments are proposed to pay back a portion of these costs based on the final assessments adopted by Council at the end of the project.

*Table 1* illustrates the proposed project funding based on the proposed design outlined within this report. This funding program assumes construction will occur in 2018.

**TABLE 1  
Proposed Project Funding**

	ASSESSMENTS	CITY FUNDS	TOTAL
<b>Estimated Costs</b>	<b>\$70,752</b>	<b>\$212,248</b>	<b>\$283,000</b>

<b>Total Estimated Project Cost</b>		<b>\$283,000</b>
Less Special Assessments (25%)	-	<u>\$70,752</u>
<b>Subtotal</b>	<b>=</b>	<b>\$212,248</b>
Less City Bonding Funds	-	<u>\$210,748</u>
<b>Subtotal</b>	<b>=</b>	<b>\$1,500</b>
Less Stormwater Utility Funds	-	<u>\$1,500</u>
<b>Total Remaining Cost</b>	<b>=</b>	<b>\$0</b>

## 6. PROJECT SCHEDULE

The proposed project schedule is as follows:

Council Orders Feasibility Report .....	January 10, 2017
Council Accepts Feasibility Report .....	January 24, 2017
Council Orders Public Hearing .....	June 13, 2017
Staff Publishes Notice of Public Hearing .....	June 16 & 23, 2017
Public Input Meetings .....	June, 2017
Council Conducts Public Hearing/Authorizes Plans and Specifications .....	July 11, 2017
Staff Conducts Private Utility Coordination Meeting .....	July/August, 2017
Council Approves Plans and Specifications/Authorizes Ad for Bids.....	December 12, 2017
Staff Advertises for Bids.....	December 15 & 22, 2017
Staff Receives Bids .....	January 16, 2018
Council Awards Contract .....	January 23, 2018
Contractor Begins Construction .....	May/June 2018
Contractor Completes Construction .....	September 7, 2018
Council Orders Assessment Roll/Hearing .....	September 11, 2018
Council Conducts Assessment Hearing.....	October 9, 2018

## 7. CONCLUSIONS AND RECOMMENDATIONS

City of Ramsey Improvement Project 17-02 proposes to reconstruct the bituminous pavement section, to remove and replace damaged concrete curb and gutter, and to complete miscellaneous appurtenant work on four street segments within the Rivers Bend residential neighborhood including 147th Lane between Xkimo Street and Waco Street, 148th Avenue between Yakima Street and Xkimo Street, Xkimo Street between 147th Lane and 149th Avenue, and Yakima Street between 148th Avenue and 149th Avenue. These street segments measure approximately 2,774 linear feet (0.53 miles).

It is the recommendation of City staff that City Project No. 17-02 is feasible, necessary, and cost-effective from an engineering standpoint. However, it would be most cost-effective to construct this project in conjunction with the Stanhope Terrace Street Reconstructions project, which is currently scheduled for construction in 2018.

The following Staff recommendations related to the proposed project are presented for Council consideration and concurrence:

1. Staff recommends reconstructing the four street segments within the Rivers Bend residential neighborhood including 147th Lane between Xkimo Street and Waco Street, 148th Avenue between Yakima Street and Xkimo Street, Xkimo Street between 147th Lane and 149th Avenue, and Yakima Street between 148th Avenue and 149th Avenue in conjunction with the Stanhope Terrace Street Reconstructions project in 2018.
2. Staff recommends ordering an assessment appraisal consultation report to ensure that the preliminary special assessments proposed herein will not exceed the benefit received as a result of the improvements in accordance with the City's Special Assessments Policy.
3. Staff recommends excluding private irrigation system work from this project, and from all future City Improvement Projects, and instead recommends notifying property owners of pending construction as far in advance as possible and instructing them to relocate the irrigation system(s) away from the construction area during construction, then allow replacement in or near the original location after construction is complete.
4. Staff recommends meeting with all owners of assessable properties to inform them of the proposed improvements, the proposed use of special assessments, and to gather their input prior to conducting the Public Hearing and requesting Council authorization to prepare plans and specifications on July 11th.

The City Council is asked to act on the following items related to the proposed project:

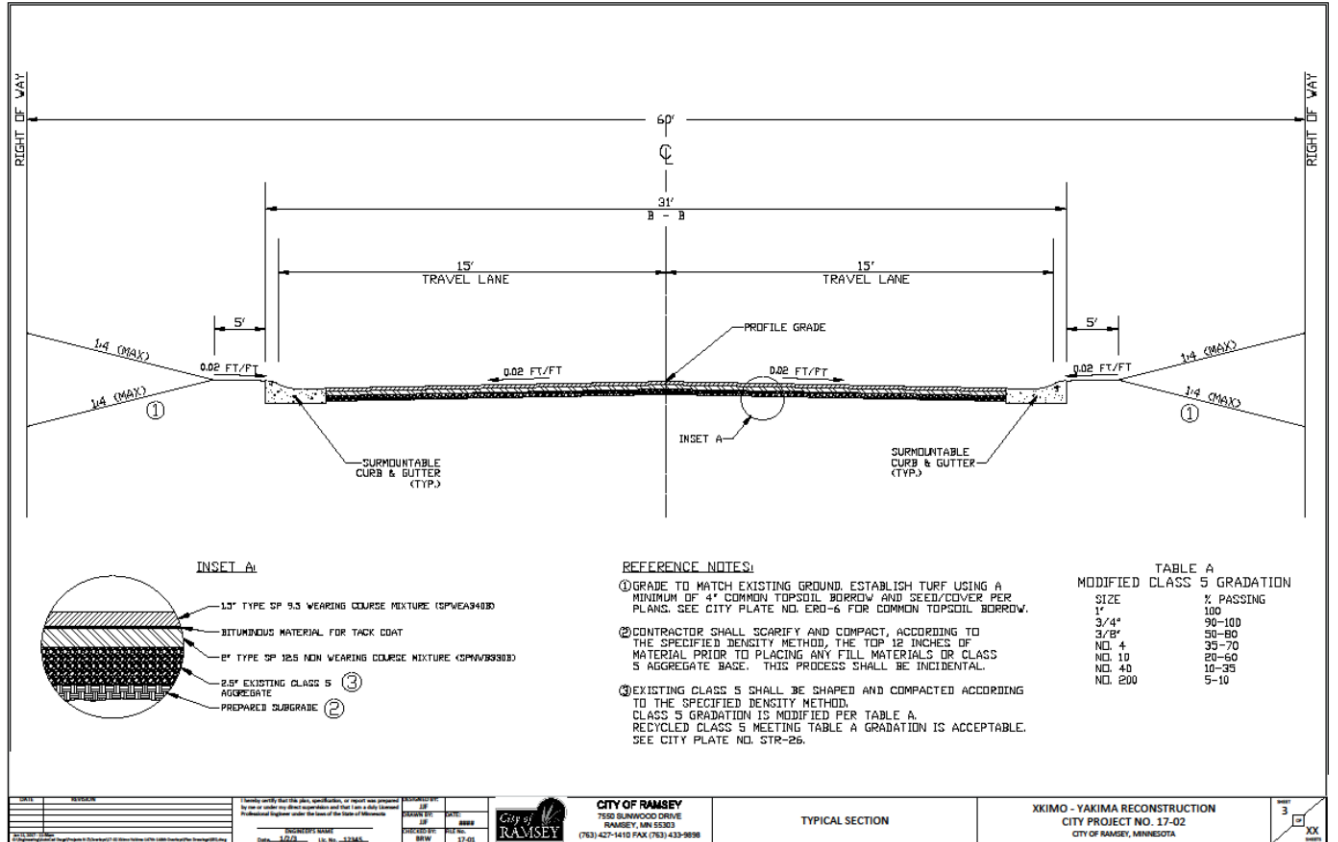
1. Accept the preliminary residential special assessment rates proposed herein.
2. Adopt Resolution #17-01-028 accepting this Feasibility Report.

## **APPENDIX A**

**Figure 1 – Project Scope**  
**Figure 2 – Typical Section**  
**Project Site Pictures**



**FIGURE 1  
PROJECT SCOPE**



**FIGURE 2  
TYPICAL SECTION**

**PROJECT SITE PICTURES**









## **APPENDIX B**

### **Opinion of Probable Costs**

**17-02 RIVER'S BEND RECONSTRUCTION**  
**ENGINEER'S ESTIMATE**  
**1/11/2017**

ITEM NO.	MNDOT NO.	ITEM DESCRIPTION	UNIT	UNIT COST	ESTIMATED QUANTITY	COST EXTENSION
1	2021.501	MOBILIZATION (8% CONSTRUCTION COST)	LS	\$ 17,031.52	1	\$ 17,000.00
2	2104.501	REMOVE CONCRETE CURB AND GUTTER	LF	\$ 14.00	500	\$ 7,000.00
3	2104.505	REMOVE CONCRETE VALLEY GUTTER	SY	\$ 30.00	65	\$ 1,950.00
4	2104.511	SAWING CONCRETE PAVEMENT - FULL DEPTH	LF	\$ 8.50	100	\$ 850.00
5	2104.513	SAWING BITUMINOUS PAVEMENT - FULL DEPTH	LF	\$ 5.50	200	\$ 1,100.00
6	2112.501	SUBGRADE PREPARATION	RDST	\$ 215.00	26	\$ 5,590.00
7	2130.501	WATER	MGAL	\$ 32.50	50	\$ 1,625.00
8	2215.501	BITUMINOUS PAVEMENT RECLAMATION (3.5" DEPTH)	SY	\$ 1.50	7929	\$ 11,893.50
9	2232.501	MILL BITUMINOUS PAVEMENT (1.5" DEPTH X 2' WIDE)	SY	\$ 16.00	45	\$ 720.00
10	2331.607	HAUL BIT PAVEMENT RECLAMATION (LV)	CY	\$ 10.00	1002	\$ 10,020.00
11	2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GAL	\$ 2.50	555	\$ 1,387.50
12	2360.501	TYPE SP 9.5 WEARING COURSE MIXTURE (SPWEA340B) (1.5")	TON	\$ 68.00	783	\$ 53,380.00
13	2360.502	TYPE SP 12.5 NON-WEARING COURSE MIXTURE (SPNWB330B) (2.0")	TON	\$ 63.00	1047	\$ 68,055.00
14	2504.602	ADJUST VALVE BOX	EA	\$ 250.00	9	\$ 2,250.00
15	2506.522	ADJUST FRAME AND RING CASTING	EA	\$ 550.00	13	\$ 7,150.00
16	2531.501	CONCRETE CURB & GUTTER DESIGN SURMOUNTABLE	LF	\$ 50.00	300	\$ 15,000.00
17	2531.501	CONCRETE CURB & GUTTER DESIGN B618	LF	\$ 50.00	200	\$ 10,000.00
18	2531.604	7" CONCRETE VALLEY GUTTER	SY	\$ 85.00	65	\$ 5,525.00
19	2563.601	TRAFFIC CONTROL	LS	\$ 3,000.00	1	\$ 3,000.00
20	2573.535	STABILIZED CONSTRUCTION EXIT	LS	\$ 3,500.00	1	\$ 3,500.00
21	2575.505	SODDING TYPE LAWN	SY	\$ 18.00	111	\$ 1,998.00
22	2575.525	COMMON TOPSOIL BORROW (LV)	CY	\$ 60.00	15	\$ 900.00
<b>TOTAL CONSTRUCTION COST</b>						<b>\$ 229,894.00</b>
<b>23% INDIRECT COST</b>						<b>\$ 52,875.62</b>
<b>TOTAL ESTIMATED PROJECT COST</b>						<b>\$ 282,769.62</b>

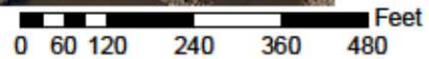
**APPENDIX C**

**Preliminary Assessment Map  
Preliminary Assessment Roll**

# RIVERS BEND ASSESSABLE PROPERTIES IP #17-02



PRELIMINARY ASSESSMENT MAP



PRELIMINARY ASSESSMENT MAP

Preliminary Assessment Roll - IP #17-02						
PID No.	Property Owner	Property Address	City	State	Zip	Assessment
253225120056	RONDO ANGELA M & JERRY D	5195 147TH LN NW	RAMSEY	MN	55303	\$1,608.00
253225120057	CICH JONATHAN	5194 147TH LN NW	RAMSEY	MN	55303	\$1,608.00
253225120058	CLOBES ADELE	5178 147TH LN NW	RAMSEY	MN	55303	\$1,608.00
253225130002	GEORGES ROBERT J & RUTH F	5164 147TH LN NW	RAMSEY	MN	55303	\$1,608.00
253225130003	SPOHN PAMELA A	5150 147TH LN NW	RAMSEY	MN	55303	\$1,608.00
253225120049	NEWBERGER JAKE	5192 148TH AVE NW	RAMSEY	MN	55303	\$1,608.00
253225120050	UPHOFF ROGER	5178 148TH AVE NW	RAMSEY	MN	55303	\$1,608.00
253225120007	TAMBA PATRICK	14882 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120008	JANIAK MICHAEL L & TINA M	14866 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120009	HEFFRON GLEN R & PAMELA J	14854 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120010	MORGAN JR JOE	14842 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120011	BUBANY BRETON	14830 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120012	COMSTOCK GREGORY J & LYNN A	14820 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120013	MARSHALL JAMES & AUDREY	14810 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120035	EMERSON EDWARD J & AMY C	14725 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120036	MALEK DAVID J & CINDY L	14737 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120037	MERKL CHRIS S & JESSICA A	14751 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120038	BAUER DANIEL	14765 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120039	BRUNEAU STEPHANIE	14777 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120040	SCHULTE ERICA	14787 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120041	DRAYNA ROBERT	14801 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120042	PAYNE RYAN L	14811 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120043	TOVSEN CAITLIN	14823 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120044	TESSMAN JILEEN	14835 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120045	HENNES RICHARD & JUDITH	14847 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120046	MANCINI FRANK E	14859 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120047	JOHNSON MARK	14871 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120048	HIGH DANIEL	14885 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120051	CLAYTON JEFFREY	14788 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120052	STROUP TIMOTHY D & VICTORIA E	14778 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120053	ROMANCHUK GERALD	14764 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120054	REYNOLDS BRIAN R & SHEILA B	14752 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00
253225120055	DANIELS JULIE A	14740 XKIMO ST NW	RAMSEY	MN	55303	\$1,608.00



## **APPENDIX D**

**Pavement Evaluations and Recommendations (WSB & Associates – 11 pages)**



December 27, 2016

Mr. Bruce Westby P.E.  
City Engineer  
7550 Sunwood Drive NW.  
Ramsey, MN 55303

Re: Pavement Evaluations and Recommendations for City of Ramsey Improvement Project #17-02  
2017 Mill and Overlay Improvements

**Observation:** On December 20, 2016 WSB & Associates cored the 147<sup>th</sup>, 148<sup>th</sup>, Yakima, and Xkimo roadways in the City of Ramsey, MN. The following observations were made during the investigation. The Hot Mix Asphalt (HMA) cores ranged in thickness from 2 inches to 3.25 inches, with the average thickness being 2.4 inches. The base material observed appears to be a mainly sandy select granular material. With the frozen ground, we were only able to chisel to depth of approximately 4 inches with no change in the base material observed. The coring locations can be found in Appendix A of this report. Pictures of each core can be found in Appendix B. Due to the streets being covered by snow it was hard to observe existing crack patterns, but the cores taken appear to be in very good condition for the age of the HMA.

**Recommendations:** Based on the following information, these streets are true residual streets, constructed in the mid-1980s, and have performed satisfactorily. It would be our recommendation to remove the existing HMA, then re-compact the granular (sand) base and repave with 3 inches of level 3 Super Pave with ½ inch mixture with 3 percent air voids made with a PG -34 binder. An example would be SPWEA330C or A, mix. Using a ½ minus mix with 3 percent air voids design should yield a very tight surface that should greatly diminish the infiltration of water into the HMA surface. Using a PG-34 binder should delay cracking over a PG-28 binder. One last suggestion to think about is possibly priming the granular base with a penetrating emulsion prime (PEP) to protect the bottoms of the HMA from damage from water coming thru the base materials.

Please let me know if you have any other questions or comments regarding this report.

Sincerely,

**WSB & Associates, Inc.**

Thomas J. Wood  
Project Manager

Mr. Bruce Westby, P.E.  
December 27, 2016

## Appendix A

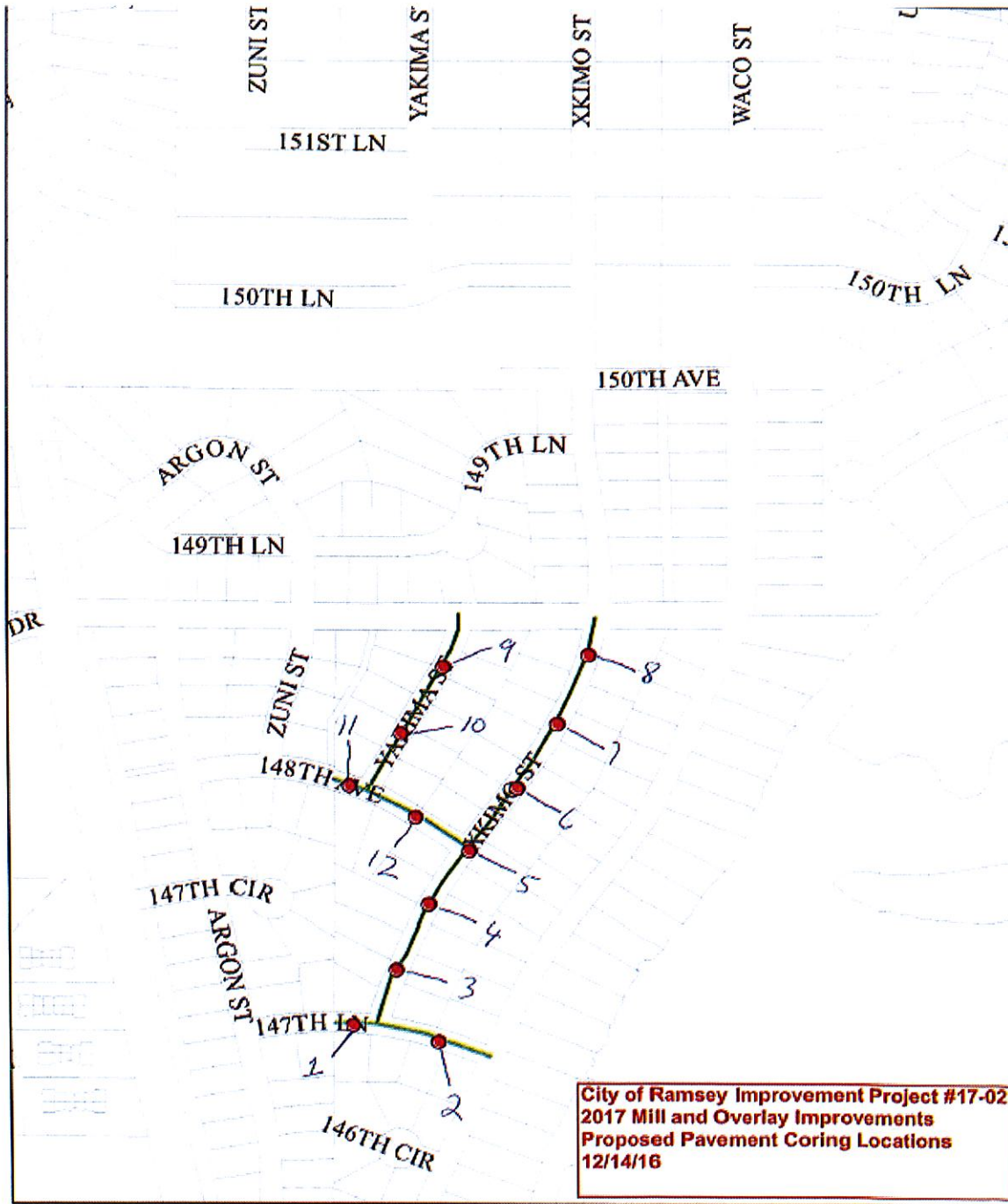


Figure 1: Coring Locations

Mr. Bruce Westby, P.E.  
December 27, 2016

## Appendix B

## Core 1



## Core 2



### Core 3



### Core 4



## Core 5



## Core 6



## Core 7



## Core 8



## Core 9



## Core 10



## Core 11



## Core 12



**Public Works Committee**

6. 2.

**Meeting Date:** 03/21/2017

**By:** Bruce Westby, Engineering/Public Works

**Title:**

Update on COR Wear Course Improvements

**Purpose/Background:**

**Purpose:**

The purpose of this case is to update the Public Works Committee on Staff's plans for completing wear course improvements within The COR.

**Background:**

Several street exist within The COR that have only the bituminous base course and no wear course. These streets include 146th Avenue between Center Street and Peridot Street, and Traprock Street between 146th Avenue and Ramsey Parkway. The total estimated length of these street segments totals 2,110 linear feet. See attached figure.

The wear course was left off of these streets to allow development of the majority of adjacent parcels to be completed first, thereby preventing damage to the wear course during build out. Unfortunately, this occurred right before the great recession which caused development to stop.

Without the final lift of bituminous, the pavement structure is weaker than it was designed to be so continued use without adding the wear course will only accelerate the end of life for the existing pavement. Staff therefore proposes to add the necessary wear course improvements to the 2018 CIP for the segment of 146th Avenue between Center Street and Peridot Street, and Traprock Street between 146th Avenue and Ramsey Parkway. The preliminary estimated cost for this work is \$60,000. No escrow funds are available to pay for this work so all costs must be covered by the City.

**Timeframe:**

Staff estimates this case will take 5 minutes to present and respond to questions.

**Observations/Alternatives:**

NA

**Funding Source:**

This work is estimated to cost \$60,000 and is proposed to be funded using PIR Funds, budgeted Street Maintenance Funds, or a combination of the two. Staff will provide this recommendation when updating the CIP later this year.

**Recommendation:**

Staff recommends adding the necessary wear course improvements to the 2018 CIP for the segment of 146th Avenue between Center Street and Peridot Street, and Traprock Street between 146th Avenue and Ramsey Parkway.

**Action:**

No action is needed on this item.

COR Streets Missing Wear Course

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**Form Review**

**Inbox**

Grant Riemer  
Kurt Ulrich  
Kurt Ulrich  
Patrick Brama  
Form Started By: Bruce Westby  
Final Approval Date: 03/16/2017

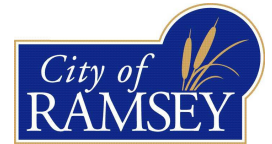
**Reviewed By**

Grant Riemer  
MaryJo Warner  
MaryJo Warner  
Patrick Brama

**Date**

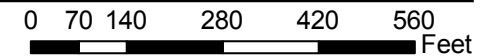
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Started On: 03/09/2017 03:19 PM

# COR Streets Missing Wear Course



LO GIS, Anoka County

Print Date: March 16, 2017



## Public Works Committee

6. 3.

Meeting Date: 03/21/2017

By: Bruce Westby, Engineering/Public Works

---

### Title:

Staff Updates on Improvement Projects and Items of Interest

### Purpose/Background:

The purpose of this case is to update the Public Works Committee on current and proposed improvement projects within the City, and on other items of interest to the Committee.

### City Improvement Projects

- **Business Park 95 Regional Stormwater Pond Improvements**
  - Work is substantially complete
  - Final payment will occur in 2017 following satisfactory completion of punch list and warranty work
- **Andrie Street & 164th Lane Reconstruction**
  - Work is substantially complete
  - Final payment will occur in 2017 following satisfactory completion of punch list and warranty work
- **Mississippi River Trail Phase 3**
  - Grading substantially completed in 2016
  - Aggregate base will be toleranced and paving will be completed in spring/summer 2017
  - Final completion scheduled for summer 2017
- **Zeolite Street Storm Sewer Extension Improvements**
  - Work is substantially complete
  - Final payment will occur in 2017 following satisfactory completion of punch list and warranty work
- **Riverdale Drive Extension - Traprock St. to Ramsey Blvd.**
  - Plans and specifications are 98% complete
  - Working with Anoka County Parks to acquire 5.3 acres of roadway right-of-way (appraised value \$200,000)
  - Construction is proposed to occur in 2017 (pending completion of right of way acquisition)
- **Alpine Drive Reconstruction**
  - Plans and Specifications are 95% complete
  - Plans to be submitted for State Aid review
  - Staff proposes to close Alpine Drive to traffic July 10<sup>th</sup> through August 25<sup>th</sup> to expedite work and for safety
  - Letters regarding closure are being mailed to residents on west end of Alpine Drive (mail and garbage pickup on Armstrong)
  - Construction proposed from July 10<sup>th</sup> through September 22<sup>nd</sup> (opens to traffic August 26<sup>th</sup>)
- **Sunwood Drive Reconstruction**
  - Plans and Specifications are being developed
  - Council approval of Plans and Specifications tentatively proposed for April 11<sup>th</sup>

### Anoka County Improvement Projects

- **Hanson Boulevard/CSAH 78 Grade Separation @ BNSF Railway Crossing (2017)**
  - Reconstruct County State Aid Highway 78 (CSAH 78) / Hanson Boulevard to a 4-lane divided section
  - Construct a grade-separated overpass for Burlington Northern Sante Fe (BNSF) railway crossing
- **Hanson Boulevard/CSAH 78 Reconstruction (2018)**
  - Expand CSAH 78 / Hanson Blvd between 139<sup>th</sup> Ave and CSAH 18 / Crosstown Blvd to 4-lane divided

section

- **Foley Boulevard/CSAH 11 Grade Separation @ BNSF Railway Crossing**
  - This project is currently unscheduled and unfunded

### MnDOT Improvement Projects

- **Trunk Highway 10 Cable Median Barrier Installation (2018)**
  - Install cable median barrier along Highway 10 between Thurston Avenue and Highway 101
- **Ferry Street / Trunk Highway 47 Grade Separation @ BNSF Railway Crossing**
  - Preliminary design underway

### Items of Interest

- **Request for Quotes for Ground Penetrating Radar, Pavement Corings and Soil Borings on Street Maintenance Projects in 2018 & 2019 CIP**
- **Highway 10 Legislation Updates**
- **House Transportation Finance Committee considering City Street Funding Bill**
  - Ramsey would receive \$197,158 if passed.

### **Timeframe:**

Staff estimates 10 minutes will be needed to provide updates and for discussion.

### **Observations/Alternatives:**

NA

### **Funding Source:**

NA

### **Recommendation:**

NA

### **Action:**

NA

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### **Attachments**

*No file(s) attached.*

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### **Form Review**

<b>Inbox</b>	<b>Reviewed By</b>	<b>Date</b>
Grant Riemer	Grant Riemer	03/16/2017 12:27 PM
Kurt Ulrich	MaryJo Warner	03/16/2017 02:23 PM
Patrick Brama	Patrick Brama	03/16/2017 02:39 PM
Form Started By: Bruce Westby		Started On: 03/07/2017 08:06 AM
Final Approval Date: 03/16/2017		

**Public Works Committee**

**6. 4.**

**Meeting Date:** 03/21/2017

**By:** Bruce Westby, Engineering/Public Works

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**Title:**

Review Future Topics Calendar

**Purpose/Background:**

Attached is a list of topics for review and discussion by the Public Works Committee. The list includes topics that were drawn from Committee requests received during meetings or are topics that have previously been discussed by the Committee but have yet to be resolved. Calendar dates have been estimated based on availability of information, staff workload, and competing objectives and are therefore subject to change.

**Timeframe:**

Staff estimates 5 minutes will be necessary to review the future topics calendar and address Committee questions.

**Observations/Alternatives:**

NA

**Funding Source:**

NA

**Recommendation:**

NA

**Action:**

For Committee review and discussion purposes only. No formal action is requested or necessary.

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**Attachments**

PWC Calendar Mar2017

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**Form Review**

<b>Inbox</b>	<b>Reviewed By</b>	<b>Date</b>
Grant Riemer	Grant Riemer	03/16/2017 12:26 PM
Kurt Ulrich	MaryJo Warner	03/16/2017 02:22 PM
Patrick Brama	Patrick Brama	03/16/2017 02:40 PM
Form Started By: Bruce Westby		Started On: 03/07/2017 08:07 AM
Final Approval Date: 03/16/2017		

**Public Works Committee Future Topics Calendar \***

<b>Date</b>	<b>Topics for Discussion – Committee Action</b>
April 2017	Well Siting Study - Well #9
May 2017	Sunfish Lake Sedimentation Basin Improvements ( <i>Westby</i> )
June 2017	Gibbon Street & 173 <sup>rd</sup> Avenue Drainage Improvements ( <i>Westby</i> )
Future	County Ditch Maintenance / Buffer Law ( <i>Westby</i> )
<b>Date</b>	<b>Topics for Discussion – Regulatory</b>
Future	CR 63 / Green Valley Road Speed Study Results ( <i>Westby</i> )
<b>Date</b>	<b>Topics for Discussion – Policy</b>
Future	Landscaped Median Maintenance Policy ( <i>Riemer</i> )
May 2017	Draft Trail Maintenance Policy ( <i>Westby</i> )
July 2017	Draft Stormwater Pond Maintenance Policy ( <i>Westby</i> )
<b>Date</b>	<b>Topics for Discussion – Planning and Budget</b>
April 2017	Review Municipal State Aid System (MSAS) Revisions ( <i>Westby</i> )
May 2017	Review 1996 and 2007 (unadopted) TH 47 Corridor Studies ( <i>Westby</i> )
Future	Public Works Facility Review/Update ( <i>Riemer/Brama</i> )
Future	Comprehensive Plan for Long-Term Water Supply ( <i>Westby</i> )
<b>Date</b>	<b>Topics for Discussion – Staff Updates</b>
May 2017	Flashing Yellow Arrow Study @ Sunwood Dr & CSAH 83 ( <i>Westby</i> )
Future	Water Conservation Options / Incentives

\* Dates are estimated and are subject to change based on availability of information, staff workload, and competing objectives.