

Item 7b.

Sunfish Lake Engineer's Report for June 3, 2014

By: ***Don Sterna, PE, City Engineer***

Date: ***May 30, 2014***

1. Engineering Activities Undertaken in the Month of May.

The following engineer's report reflects the activities undertaken this past month, along with the anticipated engineering activity for the month of May.

A. 2014 Street Reconstruction Project Update – The contractor is currently finalize their estimate of the two (2) change orders for milling and patching Salem Church Road and for the addition of a speed hump on Angell Road. I will be presenting these at the Council meeting for consideration. Also I should have the contracts for the Mayors signature at the meeting. The following is a brief project schedule for Council information:

- After June 9th, Construction Begins
- July 2014, Construction is Completed
- August 5, 2014, Council Calls for Public Assessment Hearing
- September 2, 2014, Public Assessment Hearing
- October 2014, Certify Assessments to County

B. 2015-2019 CIP Update – A copy of the 2015- 2019 CIP is attached to report for your review. The goal is to receive any comments at the July Council meeting for inclusion into the final yearly CIP update to be approved at the August Council meeting when the City not to exceed budget is discussed.

C. Spring Street Maintenance Work Update- Luhman's Construction applied a dust control agent to Charlton Road on May 25 which cost \$1,650. Salem Church Road shoulder repairs were made along with 2 sign repairs. Pine Bend Paving should have their portion of the street patching completed by June 2nd which includes the repair at Charlton Road and TH 110. The remaining street repairs to Salem Church Road are anticipated to be made by Danner Construction as part of the 2014 Street Repair Project.

2. Public Works' Activities Undertaken in the Month of May

No public works activities were undertaken during the month of May.

3. Anticipated Engineering and Public Work Activities for the Month of June:

- A. 2014 Street Reconstruction Project Update** – The contractor should be starting work shortly after June 9th. The work is anticipated to be completed within 3 weeks of commencing work.

At this time, there are no other planned City engineering activities for the month of June.

The above constitutes the Engineering Report for the City of Sunfish Lake for June 3, 2014.

Respectfully submitted,

WSB & Associates, Inc.



Donald W. Sterna, PE
City Engineer



City of Sunfish Lake

2015-2019 Capital Improvement Plan

August 5, 2014

*Sunfish Lake,
Dakota County, Minnesota*

WSB Project Number: 01011-99



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**2015 to 2019
CAPITAL IMPROVEMENT PLAN**

CITY OF SUNFISH LAKE, MN

DRAFT JUNE 3, 2014

Prepared By:

**WSB & Associates, Inc.
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Suite 300
Minneapolis, MN 55416
(763) 541-4800
(763) 541-1700 (Fax)**

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.



Donald W. Sterna, PE

Date: DRAFT June 3, 2014

Lic. No. 19103

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TITLE SHEET
CERTIFICATION SHEET
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APPENDIX A

Exhibits:

- Exhibit A – City Street map
- Exhibit B – 2014 Street Improvement Project map
- Exhibit C – Proposed 2015 to 2019 CIP map
- Exhibit D – Anticipated 2020 to 2024 CIP map

APPENDIX B

Capital Improvement Plan Summary

APPENDIX C

2012 Pavement Condition Index Map

APPENDIX D

Assessment Policy

2015 to 2019 CAPITAL IMPROVEMENT PLAN

1. INTRODUCTION

The Capital Improvement Plan (CIP) is a multi-year planning tool utilized by City officials to plan, finance, and maintain City infrastructure, usually based on a five- to ten-year period. The City's Capital Improvement Plan identifies street and drainage improvements and major street maintenance items to sustain and maintain the City's infrastructure to obtain the most useful life. The CIP process allows for a systematic evaluation of all potential projects at the same time.

As with all plans, the Capital Improvement Plan is not a legally binding document and is subject to change due to unforeseen pavement deterioration or failures, available funding, and scheduling. The plan is intended to be updated on an annual basis as part of the City's budgeting process.

2. CAPITAL IMPROVEMENT PLAN

The Capital Improvement Plan is based on the condition of the City's existing infrastructure and anticipated Capital Improvements and the typical maintenance requirements for the stated condition. What is defined as a capital project is a tangible improvement that has a life expectancy greater than one year. Improvements are then identified to maintain or reconstruct streets, drainage systems, and other infrastructure facilities. The CIP identifies an estimated project cost and determines a schedule utilizing anticipated budget availability and maintenance priority. The CIP should be reviewed annually every spring (May Council meeting) to reassess the City's infrastructure needs prior to establishing the next year's City budget. The identified costs are our early assessment of anticipated costs that will be refined along with funding options prior to authorization by the City Council.

2.1 Scheduled Maintenance

A majority of the City's current infrastructure, with the exception of Charlton Road, was constructed between 1989 to present. **Appendix A, Exhibit A** shows a map of the City streets and what year they were originally constructed. Bituminous roadway maintenance cycle is crack seal and sealcoat every seven to ten years to extend the life cycle of the City's paved roadways. The methodology of the City's pavement management is outlined in the 2007 Pavement Management Report which discusses pavement life cycle, maintenance strategies, and how pavements are evaluated. Copies of this 2007 report are available upon request.

Appendix B is the 2012 Pavement Condition Index Map that indicates the most currently evaluated pavement conditions. This Capital Improvement Plan identifies pavement and infrastructure management strategies and the City's street condition evaluated in 2012 and observed 2014 issue areas. The City should re-evaluate its infrastructure on a three-year cycle to track pavement, culvert, and street-sign conditions to better manage our infrastructure maintenance. The next pavement evaluation year is recommended in 2015.

The maintenance items indicated in the Capital Improvement Plan are:

Crack Sealing – The repair of longitudinal and transverse cracks to impede moisture from penetrating the streets aggregate base and subgrade.

Seal Coat – The surface application of bituminous oil and aggregate to provide a new traveling surface and impede the rate of oxidation of the existing bituminous pavement.

Mill and Overlay – The milling (removal) of the existing deteriorated bituminous surface and placement of a bituminous surfacing across the entire roadway surface.

Reconstruction – The reconstruction of an existing roadway due to bituminous surface, aggregate base, or subgrade failure resulting in severe bituminous cracking and fracture. The process constructs a new street section including subgrade corrections, aggregate base construction, and bituminous surfacing.

Drainage System – The cleaning, inspection, repair and/or replacement of drainage ways and culverts.

2.2 Recent/Current Capital Improvements

Recent Capital Improvements in which City financing included bonding are:

- Salem Church Road Reconstruction, Roanoke Road to Delaware Avenue Constructed in 2009, bond payment through 2020
- 2012 Crack Seal Project, funded through City general funds
- 2013 Seal Coat Project, funded through City general funds
- 2014 Street Improvements Project, funded under bonds through 2024
 - For a map of this project see **Appendix A, Exhibit B** - 2014 Street Improvement Project

2.3 2015 to 2019 Capital Improvements

The proposed CIP identifies the major improvements scheduled shown in the following exhibits:

- **Appendix A, Exhibit C** - Proposed 2015 to 2019 Capital Improvements
- **Appendix A, Exhibit D** - Proposed 2020 to 2024 Capital Improvements

It is anticipated that after 2020, the roadway system in the City will be in good to very good condition with the ongoing, yearly maintenance activities on Charlton Road.

2.4 Capital Improvements Funding

The Capital Improvements identified in the plan are improvements that are funded by the City general funds (collected from the City general tax levy), bonding and financing through assessment to benefiting properties.

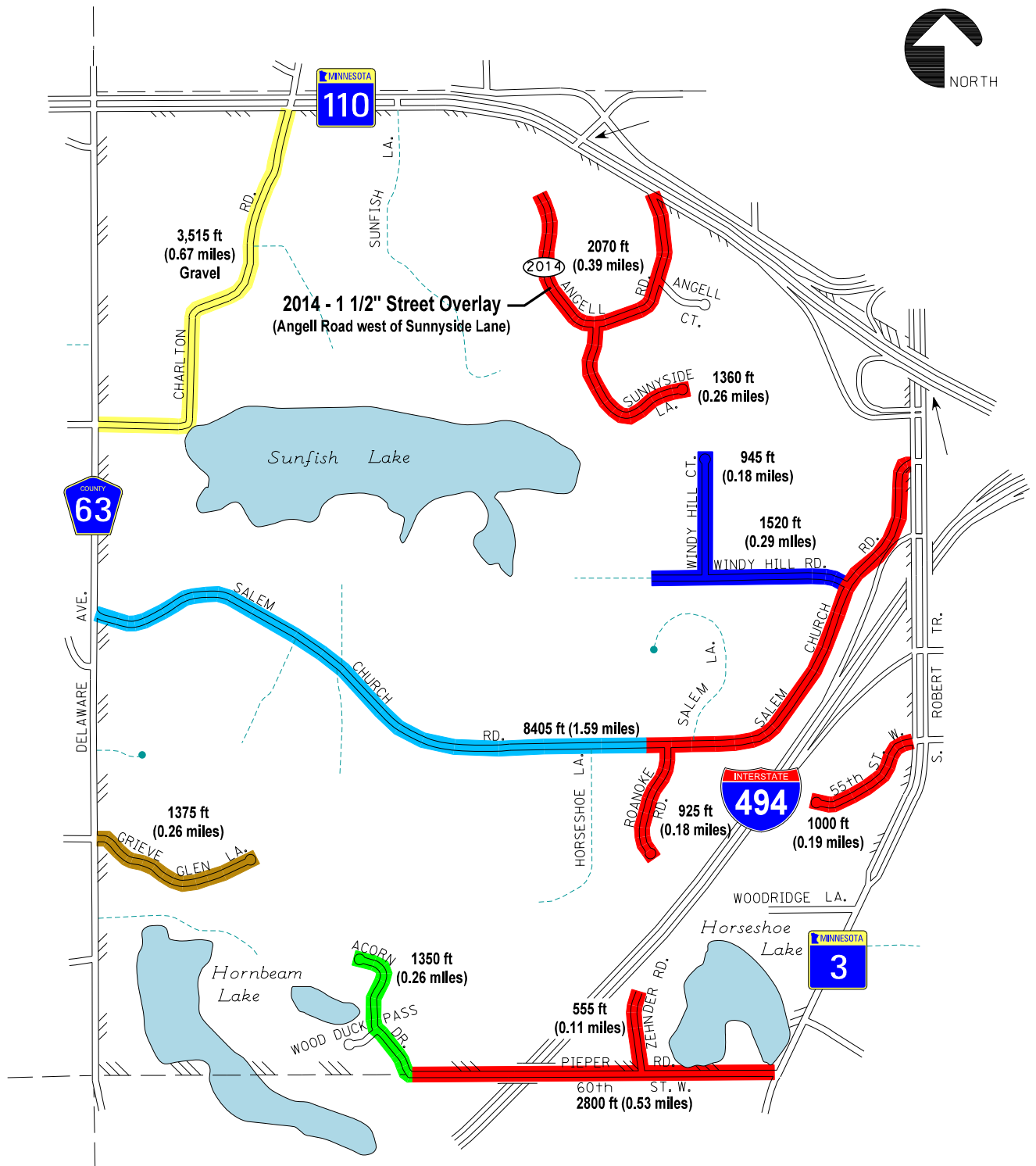
Appendix B includes the Capital Improvement Plan Project Summary of the currently identified capital improvements. It is important to note that the costs identified do not include legal, engineering, administration, and financing cost. The City's Special Assessment Policy is included in Appendix D for reference.

3. RECOMMENDATION

It is recommended the City updates its CIP every year in the spring to evaluate City infrastructure needs and assist in establishing the City budgets for road maintenance and capital improvements. It is recommended the CIP budget be separated from the routine road maintenance activities such as street sweeping, pavement patching, and sign maintenance from the capital improvement projects. We recommend that a Capital Improvement Fund be established to fund Capital Improvements accumulating funds, as needed, to complete Capital Improvement projects.

APPENDIX A

Exhibits



Note:

(XXXX) Year of Street Overlay

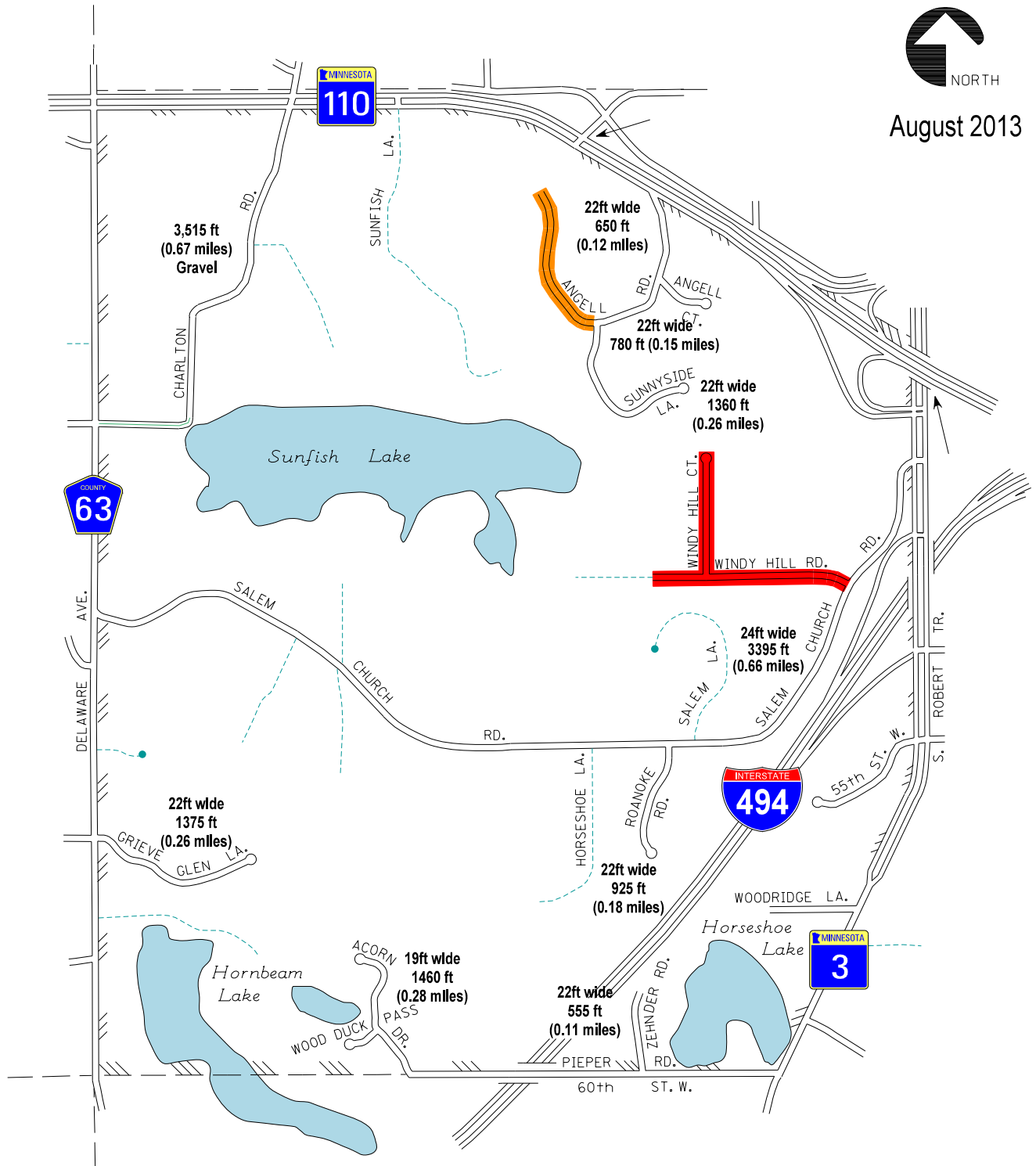
Year of Street Construction	1989	1992	1996	2006	2009	2014
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City Street Lengths: 4.24 miles of Paved Streets & 0.67 miles of Gravel Streets

Date: Printed: 5/30/2014
WSB Filename: T:\101-990\2014 CIP MAP\Exhibit A - 2014 City Street Map.dgn

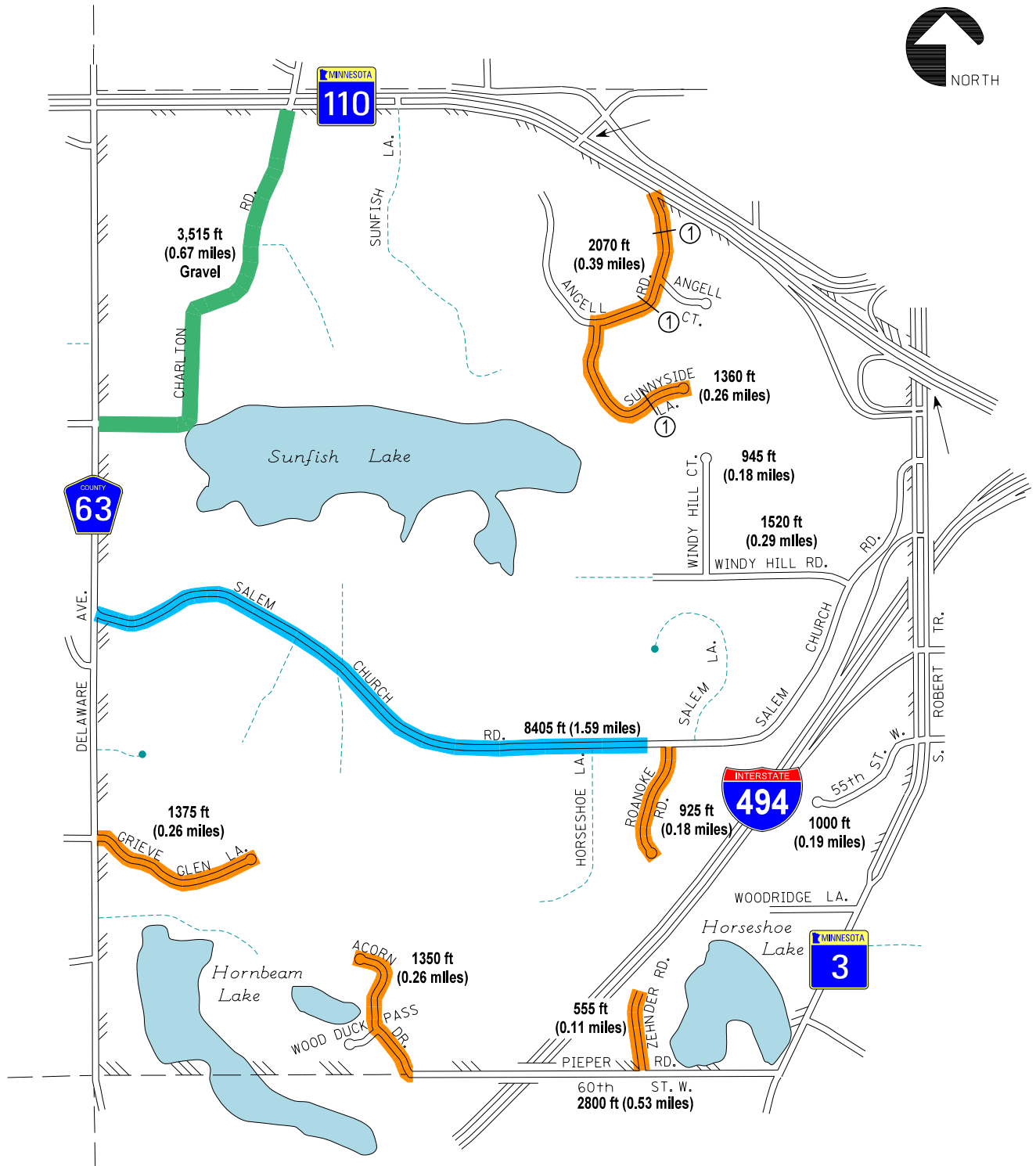


August 2013



2014 IMPROVEMENTS

— Reconstruction — 1 1/2" Overlay



Note:

① 2014 Culvert Replacement

2015 to 2019 Improvements

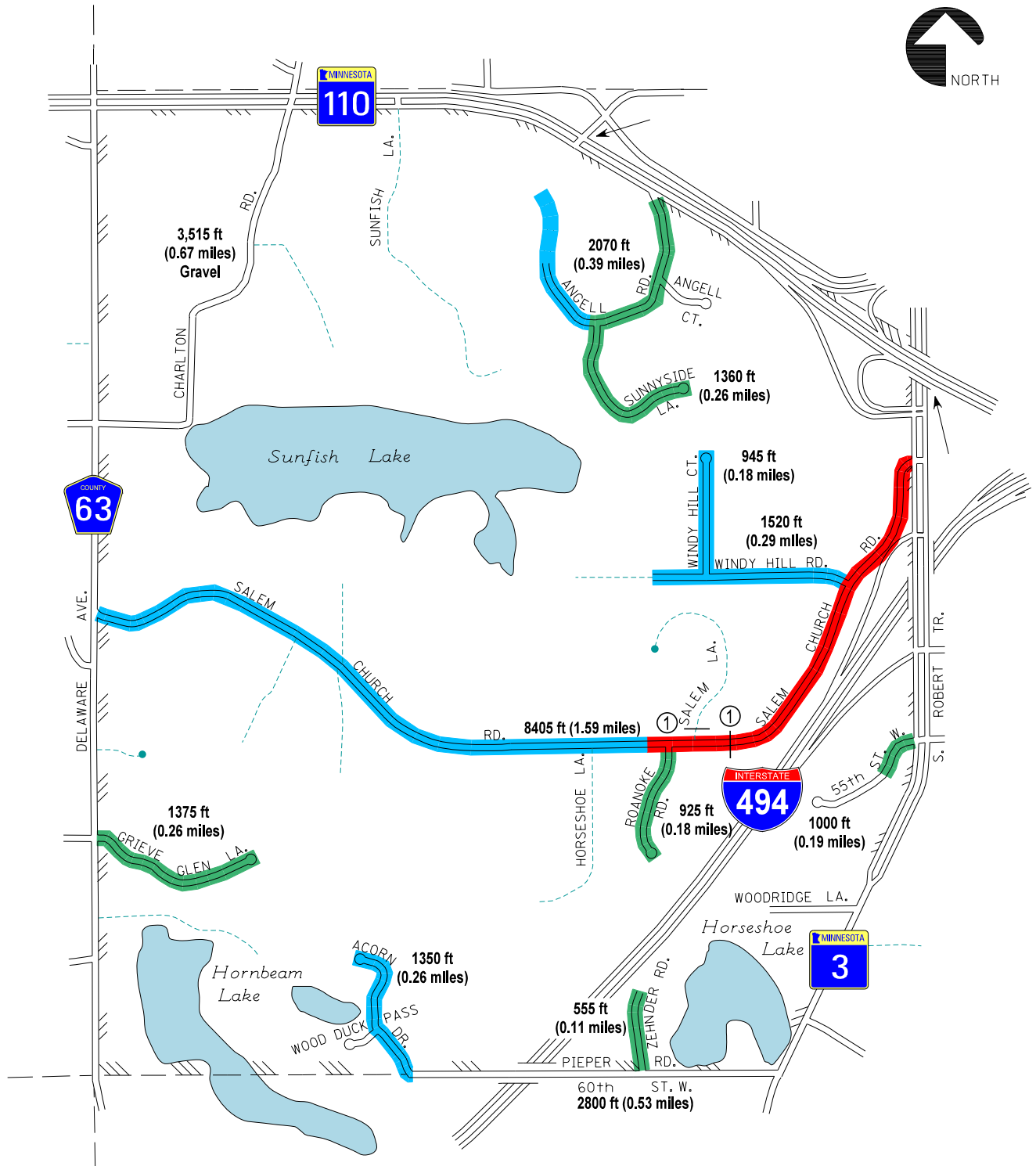
Yearly Gravel Surface Repairs

2014 Mill & Overlay

2017 Crack Fill

2014 Reconstruction

2016 Crack Fill & Seal Coat



Note:

- ① Replace Culvert with Reconstruction

2020 to 2024 Improvements

■ 2020 Mill & Overlay
■ 2020 Overlay

■ 2021 Crack Fill & Seal Coat

APPENDIX B

Capital Improvement Plan Summary

2015 - 2019 CAPITAL IMPROVEMENT PLAN

SUMMARY (Revised 06/03/14)

APPENDIX B

	Notes	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	TOTALS
<u>1.) Improvement Project Costs</u>												
<i>Charlton Road Maintenance (100% City Tax Levy)</i>												
1.) Street Grading		\$7,600	\$7,600	\$7,750	\$7,750	\$7,750	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	
2.) Dust Control		\$1,750	\$1,850	\$1,850	\$1,950	\$1,950	\$1,950	\$1,950	\$2,000	\$2,000	\$2,100	
3.) Repair and Ditch Cleaning		\$4,500			\$6,500			\$7,500			\$7,500	
<i>Subtotal Annual Road Maintenance</i>		<i>\$13,850</i>	<i>\$9,450</i>	<i>\$9,600</i>	<i>\$16,200</i>	<i>\$9,700</i>	<i>\$9,950</i>	<i>\$17,450</i>	<i>\$10,000</i>	<i>\$10,000</i>	<i>\$17,600</i>	
<i>General Street Maintenance (100% City Tax Levy)</i>												
1.) Street Sweeping		\$1,350	\$1,450	\$1,450	\$1,450	\$1,500	\$1,500	\$1,500	\$1,550	\$1,550	\$1,550	
2.) Sign Replacement and maintenance	1	\$1,500	\$1,000	\$5,000	\$1,000	\$1,200	\$1,200	\$1,200	\$7,500	\$1,000	\$1,000	
3.) Striping maintenance	1	\$4,500				\$4,600					\$4,700	
4.) Bituminous Maintenance		\$7,500	\$6,500	\$7,500	\$7,500	\$7,500	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	
5.) Shoulder Maintenance		\$950	\$950	\$1,000	\$1,000	\$1,100	\$141	\$1,100	\$1,200	\$1,200	\$1,200	
6.) Annual Lake Water Quality Monitoring	6	\$1,200	\$1,200	\$1,200	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	
<i>Subtotal General Street Maintenance</i>		<i>\$17,000</i>	<i>\$11,100</i>	<i>\$16,150</i>	<i>\$12,250</i>	<i>\$17,200</i>	<i>\$12,141</i>	<i>\$13,100</i>	<i>\$19,550</i>	<i>\$11,750</i>	<i>\$17,750</i>	
<i>Capital Improvement Plan</i>												
<i>A.) 100% City Levy Improvements</i>												
1.) Infrastructure Management Update		\$5,500			\$3,750			\$3,750			\$4,000	
2.) Crack Seal				\$12,500			\$21,000				\$25,000	
3.) Crack Seal & Seal Coat			\$30,000					\$45,000				
4.) Culvert Cleaning & End Section Repair	2	\$4,500			\$5,000							
5.) Sunfish Lake TMDL Improvements	4					\$20,000						
6.) Miscellaneous Storm Water Improvements	4				\$2,500							
7.) SWPPP Program and Implementation	5	\$6,500	\$2,750	\$2,750	\$7,500	\$3,500	\$3,500	\$3,500	\$3,750	\$8,000	\$3,750	
8.) Watershed Emergency Outlet Repair (Inver Grove Heights)				\$3,500								
<i>Sub Total CIP Projects</i>		<i>\$16,500</i>	<i>\$32,750</i>	<i>\$18,750</i>	<i>\$18,750</i>	<i>\$23,500</i>	<i>\$24,500</i>	<i>\$52,250</i>	<i>\$3,750</i>	<i>\$8,000</i>	<i>\$32,750</i>	
<i>B.) Assessed City Improvements</i>												
1.) 2014 Street Improvement Project	3	<u>\$34,000</u>	<u>\$34,000</u>	<u>\$34,000</u>	<u>\$34,000</u>	<u>\$34,000</u>	<u>\$34,000</u>	<u>\$34,000</u>	<u>\$34,000</u>	<u>\$34,000</u>	<u>\$34,000</u>	<u>\$340,000</u>
2.) Pavement Mill & Overlay, East half of Salem Church Road east of Roanoke Road	3							<u>\$45,000</u>	<u>\$45,000</u>	<u>\$45,000</u>	<u>\$45,000</u>	<u>\$180,000</u>
<i>Sub Total Assessed City Projects</i>		<i>\$34,000</i>	<i>\$34,000</i>	<i>\$34,000</i>	<i>\$34,000</i>	<i>\$34,000</i>	<i>\$34,000</i>	<i>\$79,000</i>	<i>\$79,000</i>	<i>\$79,000</i>	<i>\$79,000</i>	
<u>2.) Funding Sources</u>												
<i>City Tax Levy (Collected from General Tax Levy)</i>												
CITY PARTICIPATION (Charlton Rd Annual Maintenance + CIP Projects - Assessed Costs)		\$47,350	\$53,300	\$44,500	\$47,200	\$50,400	\$46,591	\$82,800	\$33,300	\$29,750	\$68,100	
Salem Church Road City Levy (Final Payment 2/1/2020)		\$27,583	\$27,777	\$27,081	\$27,176	\$27,220	\$27,215					
2014 Street Improvement Bond Repayment Levy		\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000		
2020 Street Improvement Bond Repayment Levy								\$10,000	\$10,000	\$10,000	\$10,000	
<i>Subtotal City Tax Levy Funding</i>		<i>\$92,933</i>	<i>\$99,077</i>	<i>\$89,581</i>	<i>\$92,376</i>	<i>\$95,620</i>	<i>\$91,806</i>	<i>\$110,800</i>	<i>\$61,300</i>	<i>\$57,750</i>	<i>\$78,100</i>	
<i>Assessed City Improvements (Collected from Special Assessments)</i>												
Salem Church Road Bond Repayment (Final Payment 2/1/2020)		\$11,618	\$11,617	\$12,482	\$12,532	\$12,609	\$12,711					
2014 Street Improvement Bond Repayment Levy		\$22,000	\$22,000	\$22,000	\$22,000	\$22,000	\$22,000	\$22,000	\$22,000	\$22,000	\$22,000	
2020 Street Improvement Bond Repayment Levy								\$12,000	\$12,000	\$12,000	\$12,000	
<i>Subtotal Special Assessment Funding</i>		<i>\$33,618</i>	<i>\$33,617</i>	<i>\$34,482</i>	<i>\$34,532</i>	<i>\$34,609</i>	<i>\$34,711</i>	<i>\$34,000</i>	<i>\$34,000</i>	<i>\$34,000</i>	<i>\$34,000</i>	

Notes

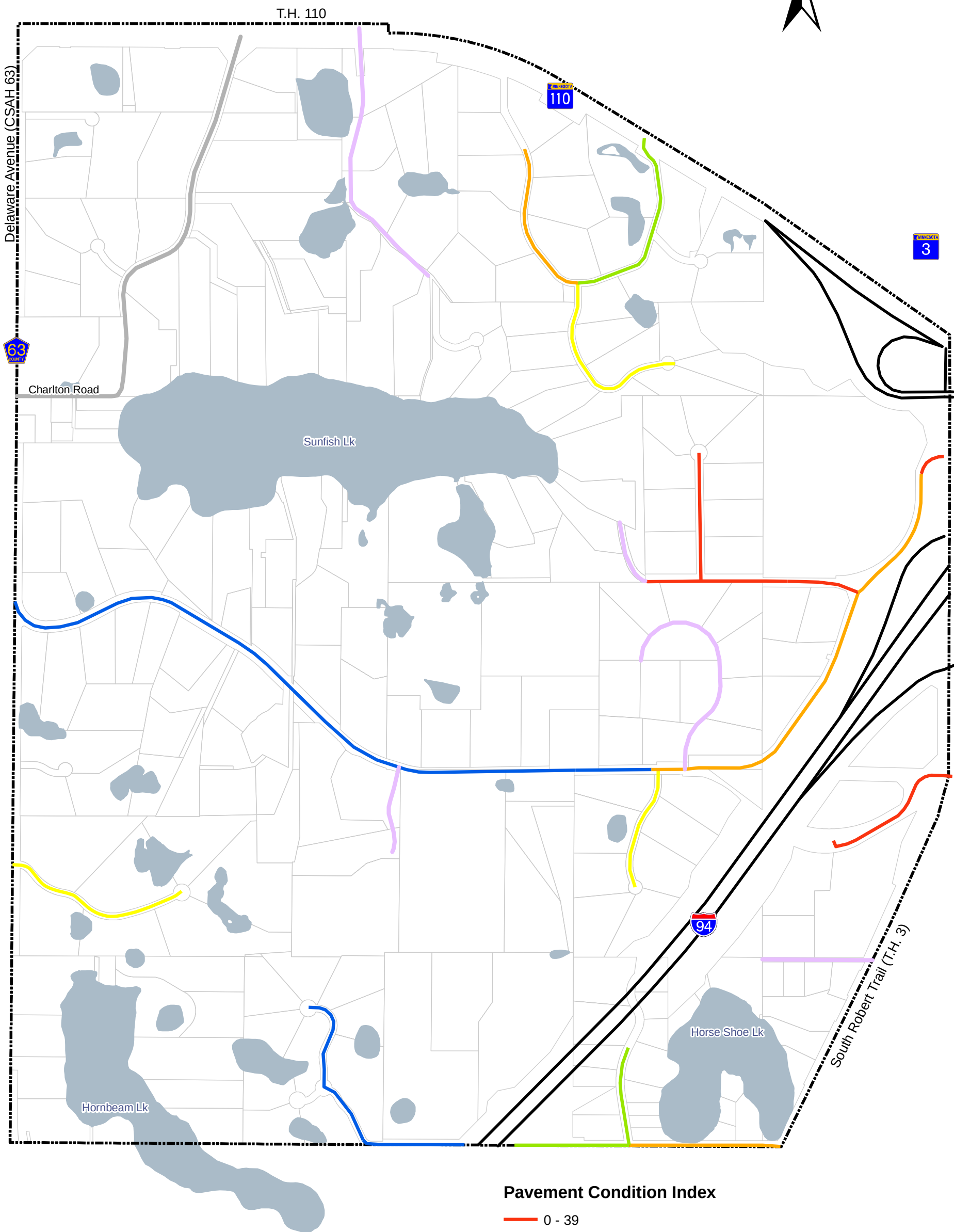
- 1.) Replace Regulatory Signs
2.) Charlton Road, Grieve Glen Lane, Sunny Side Lane and Windy Hill Court Culverts
3.) Mill and Overlay and / or Reconstruct; assumes project to be assessed per city policy and bonded over 10 years
4.) Storm Water Improvements Required by MS4 Permit
5.) Water Quality Improvements per MPCA requirements
6.) Watershed typically reimburses City \$400 per lake for CAMP monitoring

APPENDIX C

2012 Pavement Condition Index

2012 Pavement Condition Index

City of Sunfish Lake, Minnesota



APPENDIX D
Assessment Policy

**CITY OF SUNFISH LAKE
DAKOTA COUNTY, MINNESOTA**

RESOLUTION NO. 11- 12

**RESOLUTION APPROVING ASSESSMENT POLICY FOR
THE CITY OF SUNFISH LAKE**

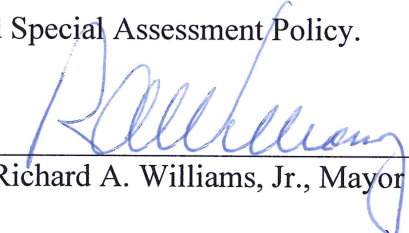
WHEREAS, Chapter 429 of the Minnesota Statutes authorizes the City to levy special assessments for certain public improvements.

WHEREAS, the City desires to adopt a formal written policy with respect to the methodology of allocating project costs between the City and special assessments and a methodology for dividing the special assessment amount among the specially benefitted properties.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SUNFISH LAKE:

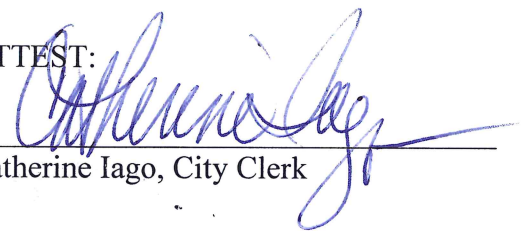
1. The Council hereby approves the attached Special Assessment Policy.

Passed this 5th day of July, 2011.



Richard A. Williams, Jr., Mayor

ATTEST:



Catherine Iago, City Clerk

CITY OF SUNFISH LAKE
DAKOTA COUNTY, MINNESOTA

SPECIAL ASSESSMENT POLICY

Section 1. Background. Chapter 429 of the Minnesota Statutes authorizes the City to levy special assessments for certain public improvements. The two most common types of public improvements within the City are street improvements and storm water improvements.

The City acknowledges that the validity of any special assessment to a particular lot depends on whether the amount of the assessment is equal to or less than the benefit conferred upon the lot by reason of the public improvement. Under state law, the benefit is determined by the increase in fair market value of the lot caused by reason of the improvement. The benefit rule controls all special assessments and supersedes any City formulas and calculations relating to how project costs are allocated. The City also acknowledges that assessments have to be uniformly imposed on similarly situated properties within a class of properties.

The first step in determining an assessment is to determine which portion of project costs will be paid by the City and which portion will be specially assessed. The second step is to spread or divide the total assessment amount among the various lots that have received a special benefit. This policy addresses both steps. The policy is a guideline and the Council has the authority to alter the policy from time to time based on facts and circumstances that the Council believes justify such changes.

Section 2. Street Improvements. The typical types of street improvements in the City are:

- a. Sealcoating;
- b. Mill and overlay; and
- c. Street reconstruction, including new pavement where none existed before.

If only sealcoating is being performed, the policy is not to assess the cost of the sealcoating. Rather, the City will pay the cost of sealcoating out of the general fund as a maintenance item.

Projects involving mill and overlay and street reconstruction will be specially assessed. The percentage of costs that will be specially assessed depends on the type of street.

Within the City, there are three (3) types of streets. They are:

- a. Collector Street. – A collector street is a City street that provides access to local streets, private streets, direct driveway access and is utilized by the surrounding area for trips originating outside of the City and terminating outside of the City limits. The number of through trips exceed the number of local trips. The City streets that meet this criteria are:

- Salem Church Road; and
- Charlton Road.

The assessment policy for a Collector Street is to assess 40% of street improvement cost to the specially benefitted properties.

- b. Neighborhood Collector Street - a neighborhood collector street is a City street that provides direct access to local streets, private streets, direct driveway access and has fewer trips that originate outside of the area and terminate outside the area than local trips. A local trip is considered a trip that remains within the City limits. The City streets that meet this criteria are:

- 60th Street North;
- Windy Hill Road; and
- Angell Road (east of Sunnyside Lane).

The assessment policy for a Neighborhood Collector Street is to assess 60% of street improvement cost to the specially benefitted properties.

- c. Local Street - a local street is a City Street that only provides direct access to private driveways which has trips that originate on the street and or terminate on the street. A local street includes a public street that provides access to shared driveways. The City Streets that meet this criteria are:

- Acorn Drive;
- Zehnder Road;
- 55th Street West;
- Roanoke Road;
- Grieve Glen Lane;
- Windy Hill Court;
- Angell Road (west of Sunnyside Lane); and
- Sunnyside Lane.

The assessment policy for a Local Street is to assess 80% of street improvement cost to the specially benefitted properties.

The special assessments for mill and overlay and for street reconstruction will be spread or divided on a per buildable lot basis with each such lot receiving an equal amount of assessment.

A special assessment for mill and overlay and for street reconstruction will be amortized over a period of time not less than five years and not more than ten years. The interest rate payable by the landowners on the remaining balance of the special assessments will not be more than 2% above the bond interest rate charged the City. If the City has not issued bonds, the interest rate charged the landowners will not be more than 2% above the estimated interest rate that the City would have incurred if bonds were issued to finance the project. Interest will begin to accrue from the date the assessments are levied.

To the extent storm water improvements are constructed with the street improvements and are incident and ancillary to the street improvement and do not otherwise confer significant benefit to properties outside of the lots that would typically be assessed for the street improvements and do not constitute more than 50% of the project costs, the storm water improvements will be considered as part of the street assessments and will be levied on the same basis as the street assessments.

In general, in determining the specially benefitted properties for a street assessment, the following lots will be included:

- a. The lots that adjoin a public street or have indirect driveway access to the public street.
- b. The lots that adjoin or have indirect driveway access to a private street where the private street has access to the public street that is being improved.

Section 3. Storm Water Improvements. Storm water improvements include such items as culvert repair or reconstruction, holding ponds, erosion control, drainage ditch reconstruction, surface drainage improvements, trunk lines, and lateral lines.

Storm water improvements can generally be placed into two (2) categories:

- a. Lateral Storm Water Management Improvements. Lateral storm water management improvements benefit the immediate adjacent area. Lateral storm water management improvements are storm water infrastructure facilities that receive runoff from adjacent public right of way or from some or all adjacent parcels but do not include significant runoff from locations that are off site of the improvements.
- b. Trunk Storm Water Management Improvements. Trunk storm water management improvements benefit an area that extends beyond the immediate property (i.e. beyond the lateral benefit). Trunk storm water management improvements manage runoff from areas of the City that are not immediately adjacent to the improvement. The trunk portion of an improvement is the size or cost of the improvement that exceeds the lateral storm water needs. Trunk storm water management improvements usually have a design and capacity to receive storm water runoff from lots that adjoin the improvement as well as non-adjoining lots.

Lateral storm water management improvements will be assessed to the adjacent specially benefitted properties on the same basis as a street assessment, taking into account the different classes of streets and allocating the assessable portion of the project on a per buildable lot basis.

With respect to trunk storm water management improvements, 50% of the project costs will be assessed and the assessable amount will be spread or divided among the specially benefitted properties on a per buildable lot basis with each such lot receiving an equal amount of assessment.

Special assessments for lateral storm water management improvements and trunk storm water management improvements will be amortized over a period of time not less than five years and not more than ten years. The interest rate payable by the landowners on the remaining balance of the special assessments will not be more than 2% above the bond interest rate charged the City. If the City has not issued bonds, the interest rate charged the landowners will not be more than 2% above the estimated interest rate that the City would have incurred if bonds were issued to finance the project. Interest will begin to accrue from the date the assessments are levied.