



CITY OF SPRING PARK
WORK SESSION AGENDA
SEPTEMBER 16, 2019 – 6:00 PM
SPRING PARK CITY HALL

(Work Session discussion times are approximate)

1. 6:00 – WEST ARM WEST FEASIBILITY STUDY REVIEW
2. 6:25 – LOCAL WATER MANAGEMENT PLAN
3. 6:30 – 2020 PRELIMINARY BUDGET & LEVY
4. 6:50 – MISCELLANEOUS
5. 6:55 – ADJOURN

**FEASIBILITY REPORT
AND COST ESTIMATE
FOR
IMPROVEMENT PROJECT NO. 21815
WEST ARM ROAD WEST
2020 STREET AND UTILITY IMPROVEMENTS**

**CITY OF SPRING PARK, MINNESOTA
September 2, 2019**

Concrete curb and gutter and sidewalk, pedestrian ramp improvements, regional trail connection, storm sewer and structure improvements, street reconstruction, West Arm Road West access road, new sanitary castings and rings, sanitary cured in place piping, water main pipe bursting, and appurtenant construction.

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.



Brian J. Hare, PE
Project Manager
Minn. Reg. No. 52610



CITY OF Spring Park
4349 Warren Ave
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Reviewed By: Dan Tolsma
City Administrator

Prepared By: Brian Hare, PE
Project Manager

FEASIBILITY REPORT

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West Arm Road West

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FEASIBILITY REPORT PROJECT NO. 21815

EXECUTIVE SUMMARY

The proposed project will include:

- Reconstruction of West Arm Road West from Shoreline Drive (CSAH-15) to 4600 West Arm Road West
- Utility improvements in drainage and utility easement located along the Lake Minnetonka shoreline.
- Utility improvements in West Arm Road West Right-of-Way
- Access road from Shoreline (CSAH-15) to West Arm Road West

Proposed improvements include new concrete curb and gutter, sidewalk, ADA pedestrian ramp improvements, trail connection, access road, storm sewer and structure improvements, new sanitary castings and rings, sanitary sewer, full depth reclamation, new sanitary castings and rings, water main, valves, and hydrants, and appurtenant construction.

The estimated cost of improvements is \$1,082,500 with \$98,200 proposed to be assessed over a ten-year period. Rehabilitation of the existing sanitary sewer, water main, and related appurtenances including replacement of castings, rings, valves, and hydrants, and fittings and water main reconstruction and appurtenances has an estimated cost of \$329,200 and is proposed to be paid for in part by City Sewer and Water Funds. The City is eligible for up to \$45,000 reimbursement for I&I improvements through the MCES I&I Grant. The remaining portion is proposed to be paid from the City's General Obligation Funds and Bonding.

The project is necessary, cost-effective, and feasible and will result in a benefit to the properties proposed to be assessed.

1. PROJECT HISTORY

The Spring Park City Council initiated the project and ordered the preparation of a feasibility report on May 20, 2019.

This report is based on field observations, record drawing information, 1982 Feasibility Study for West Arm Road West Access Road, 2017 aerial photography, and a 2019 topographic survey.

2. PROJECT AREA CHARACTERISTICS

The proposed project area includes the following areas:

- Reconstruction of West Arm Road West from Shoreline Drive (CSAH-15) to 4600 West Arm Road West
- Utility improvements in drainage and utility easement located along the Lake Minnetonka shoreline
- West Arm Road West Access Road from intersection of Island Drive/Shoreline north to West Arm Road West

West Arm Road West

On July 29, 1968, a 25-foot right-of-way was dedicated for West Arm Road West, from Shoreline Drive (CSAH-15) to the dead end located at 4600 West Arm Road West. The road was constructed in 1968 with a section consisting of 2 inches of bituminous pavement over the existing oiled surface road on 6 inches of aggregate base. A detail from the 1968 plan shows that areas of unsuitable material were excavated and replaced with granular backfill. June 26, 1971, the City of Spring Park adopted Resolution 71-15 which reduced the dedicated right-of-way from 25 feet to 20 feet. The current road has a rural road section that varies in width from 14 – 19 feet, with a ditch and bituminous curb and gutter along the south side of the road. The last record of pavement rehabilitation occurred in 1968 when the road was originally paved. No other records of pavement rehabilitation activities were found apart from pothole filling.

Right of Way

There are two areas in which the road pavement section is outside of the right-of-way by 2-feet. There are four areas in which driveways extend into the City right-of-way. Additionally, there are two sections of retaining wall that reside within the road right-of-way. The majority of mailboxes along the southside of the road are on, or just within, the right-of-way, in addition to three power poles located on, or just within, the right-of-way. This list of right-of-way conflicts effectively reduces the available right-of-way to 14-feet. The minimum recommended lane width for 1 vehicle is 10-feet. The minimum width requirement for a fire apparatus in the IFC (International Fire Code) and NFPA 1 (National Fire Protection Code) is 20-feet.

Fire Protection

The City of Spring Park contracts with the City of Mound to provide Fire Protection Services. In 1981, The City of Mound Fire Chief began sending memos to the City of Spring Park notifying the City of the access restriction under Seton Channel Bridge as it relates to fire service vehicles, see Appendix A.

Section 503.2.1 of the 2003 Minnesota State Fire Code clearly defines the dimensions of a fire apparatus access road as follows:

“Fire apparatus access roads shall have an unobstructed width of not less than 20 feet and an obstructed vertical clearance of 13 feet 6 inches. Potential for accumulation of snow and ice should be factored into height requirements.”

Additionally, the IFC and NFPA comments as follows:

“Fire apparatus access roads servicing a fire hydrant shall be a minimum of 26 feet in width.”

“Fire apparatus access roads must be within 150 feet of the farthest exterior point of a building.”

“Fire apparatus access roads in excess of 150 feet in length shall be provided with an approved turn around per IFC table D103.4 (IFC section 503.2.5 and D103.4).”

“Fire apparatus access roads are required to have a minimum inside and outside turn radius of 25 feet and 50 feet, respectively.”

“Fire apparatus access roads should be designed to handle a design load requirement of 75,000 lbs.”

The current configuration of West Arm Road West and Seton Channel Bridge does not meet NFPA and IFC requirements for a Fire Apparatus Access Road.

In 2018, a small concrete swale was temporarily constructed on the north side of West Arm Road West, west of the Seton Village Townhomes entrance, in order to reduce ponding due to the poor drainage. There is an additional bituminous curb cut and swale on the south side of the road, approximately 120 feet east of the Seton Village Townhomes entrance.

The pavement on West Arm Road West has reached the point of failure with settling, block, transverse and longitudinal cracking and has failed to a point where an overlay is not feasible. Existing overland drainage creates ponding along alignment due to insufficient storm sewer facilities and pavement settling. Existing storm culverts have not been maintained and subject to reduced capacities.

Drainage and Utility Easement

The Drainage and Utility easement was prepared in 1963 prior to the construction of the sanitary sewer and water improvements. The easement is 20 feet wide and provides easement access to 4 sanitary manholes, 3 gate valves, 3 fire hydrants, 1,360 feet of 8" VCP sanitary sewer, and 1,350 feet of 6" CIP water main. The intent of the easement is to provide utility service to lake side houses and eliminate the cost and need for excessively long water and sanitary services lines as well as grinder pump stations.

West Arm Road West Access Road

In 1969, at the City's request, the City Engineer composed a Feasibility Study that addressed the need for an access road from West Arm Road West, across the Great Northern rail tracks, to Shoreline Drive (CSAH-15) through the eastern portion of the former A&W Restaurant property (PIN#1811723330003). Property owners petitioned against the access road crossing the railroad tracks citing concern of vehicular contact with a low volume train track. The property owner of the A&W Restaurant refused the proposed acquisition of his property for public right-of-way and the project failed to move forward.

In 1980, the City of Mound Fire Chief submitted a memo to the City of Spring Park explaining that their new aerial truck would not fit through the Seton Channel Bridge underpass.

In 1981, residents of West Arm Road West submit signed petition to the City to change and improve access to West Arm Road West. In 1982, the City Engineer put together a Feasibility Study, along with a signed petition from the residents, requesting an at-grade crossing to West arm Road West on the east side of the A&W property. Similar to the project proposal from 1968, the A&W Restaurant property owner refused the proposed acquisition of his property for public right-of-way, as did the property owner to the east of the A&W property. In addition, the property owners petitioned against the project citing concern of vehicular contact with a low volume train track. The project again failed to move forward.

The proposed alignment for the proposed West Arm Road West Access Road is located on the East side of 4642 Shoreline Drive. This alignment consists of a continuous elevation from Shoreline, across the Dakota Rail Trail, and termination at West Arm Road West. The proposed alignment traverses the east 50 feet of the parcel. The east side of the property is host to a small building along the east side of the parcel. The City currently has no easement or right-of-way along this alignment.

HCRRA Pedestrian Bridge

The current Dakota Region Trail Pedestrian Bridge (Seton Channel Bridge) was originally built by the Great Northern Railroad Company as a timber construction railroad bridge. In 2008, Three Rivers Park District along with Hennepin County Regional Rail Authority acquired the Great Northern Railroad Company right-of-way corridor and converted it to the Dakota Regional Trail. Although acquired for future transportation needs, recreational trails have been constructed on this corridor as an interim use.



The Hennepin County Soil Survey indicates the predominant soil types in the project area to be L2B Malardi-Hawick complex, L22C2 Lester loam, L37B Angus loam, L64A Tadkee-Tadkee, depressional complex, and U1A Urban land-Udorthents, wet substratum. Based on past projects in the area, and expected depth of shallow storm sewer, the project is expected to require some level of dewatering operations.

The proposed project is located in Minnehaha Creek Watershed District. No portion of the project will impact wetlands as identified on the City's wetland inventory map.

See Exhibit No. 1 for the project location.

3. PROPOSED IMPROVEMENTS

The proposed improvements will include reconstruction of the existing street section, storm sewer improvements, water main improvements, sanitary sewer improvements, replacement of sanitary sewer castings and rings, and an access road to provide fire protection service access per the NFPA requirements. The improvements are necessary, cost-effective, and feasible. Each improvement is further described as follows:

A. Sanitary Sewer and Water Main

The 8-inch Vitrified Clay Pipe (VCP) sanitary sewer was installed in 1964 along with the 6-inch Cast Iron Pipe (CIP) water main.

The 2017 Asset Management Plan measured risk for utilities by combining both the Likelihood of Failure (LOF) and the Consequence of Failure (COF). LOF considered a number of items, some of which include: Age, Pipe Conditions, Pipe Segment Lengths, Pipe Material, Failure History, etc. COF considered the following items: Distance from Above Ground Water Source, Cost associated with Pipe Failure, Proximity to Structure, Proximity to other Vital Infrastructure, Effect on Public, etc.

Likelihood of Failure (LOF)

Age – The recommended life expectancy of VCP sanitary sewer is 50 years. The recommended life expectancy of CIP is also 50 years. As the age of the pipe exceeds this recommendation, risk of failure increases. In areas with good soils and proper pipe bedding, pipes can exceed the life expectancy. In areas with minimal access, inflow and infiltration, and high ground water, the risk can be higher as age increases.

Pipe Condition – The pipe conditions of the 8-inch sanitary sewer and 6-inch water main were assessed as part of the 2017 Asset Management Report. The sanitary sewer pipe condition assessment utilized Closed Circuit Television (CCTV) to inspect the interior conditions of the pipe. This involved review of I&I, pipe cracks, roots, pipe sags, joint separation, and calcification of joints using Pipeline Assessment and Certification Program (PACP) pipe ratings. The water main assessment utilized water break data, age and pipe material, and life expectancy to determine the expected pipe condition.

Pipe Lengths – VCP pipe typically comes in 3-foot to 6-foot laying length, as opposed the typical 20-foot pipe length of PVC. The increased frequency of pipe joints offers an additional potential for I&I if not properly installed.

Failure History – There is no recorded history of sanitary sewer pipe failure in this area. There are 2 recorded water main breaks from the late 1990's.

Consequence of Failure (COF)

Distance from Above Ground Water Source – The distance from nearest above ground water source, Lake Minnetonka, is approximately 20-feet. This proximity typically gives a high rank for COF.

Cost Associated with Pipe Failure – In the event of a shoreline sanitary pipe collapse, the wastewater would be discharged directly to Lake

Minnetonka. The result of a pipe failure would result in fines from the Minnesota Department of Health and the Minnesota Pollution Control Agency resulting in up to \$10,000 per day from each entity for a total of up to \$20,000 per day in fines. Similar fines are to be expected from the Environmental Protection Agency. In the event of a water main break and risk of shoreline erosion and sedimentation/deposition in Lake Minnetonka, there will be additional coordination and fines with the U.S. Army Corps of Engineers. Depending on the severity of the utility failure and duration and quantity of discharge, there is additional risk of litigation as a result of environmental impact.

In addition to the cost of fines is the cost of the actual repair. In the event of a utility failure emergency, the repair cost is on average 3-4 times higher than the normal market value construction cost of a planned repair. Due to the lack of access to the shoreline utilities, it is expected that this would likely exceed the 3x-4x multiplier.

Proximity to Structures – Approximately 58% of the water main and 54% of the sanitary sewer is located in a drainage and utility easement. Within this easement are several retaining walls, concrete walks, and landscaped areas. In the event of a utility failure, there would be cost to the City as well as the possibility of damage to structural retaining walls.

Proximity to Adjacent Infrastructure – Sanitary sewer and water main are typically no less than 10 feet apart, with sanitary sewer at a lower elevation than the water main. In the event of a utility failure, there is a possibility of having an effect on the adjacent utility.

Effect on Public – Due to the portion of utilities on a drainage and utility easement, the lack of access roads for construction vehicles, the number of private features located in or around the easement, topography, and number of fences, the effect of a utility failure on the public would likely be more than one day, depending on the type, severity, and location of the failure.

Using the weighted values assigned from the 2017 Asset Management Report show a high Consequence of Failure and a mid to high Likelihood of Failure.

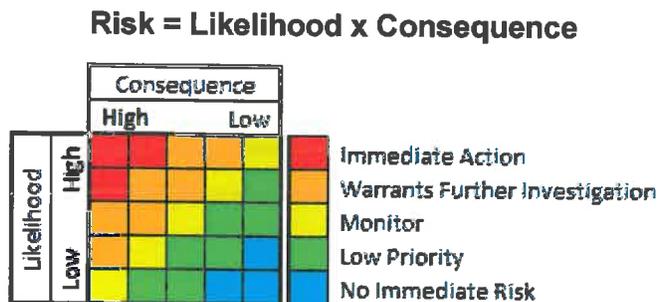


Figure 1 - Risk Assessment Matrix
Source: (Thomson & Wang, 2009)

Public Works and Engineering staff have reviewed the existing sanitary sewer and water main along the project corridors. CCTV from 1997 show moderate to significant Infiltration and Inflow (I&I) in the sanitary sewer along the shoreline. I&I has a direct cost to the City as the City and taxpayer is responsible to pay for excess groundwater to be treated as part of the treatment process. The sanitary sewer located in the drainage and utility easement is proposed to be improved with cured-in-place piping (CIPP). Due to the proximity of the lake, CIPP is the least invasive and will cause the least disturbance to the property of the homeowners. The project will include the removal existing manhole castings and rings and the installation of new watertight castings and rings on all sanitary manholes along with an external/internal chimney seal to further reduce I&I potential.

In order to have the minimal impact on property owners while still improving the water main, it is recommended that the 6-inch CIP water main be improved with trenchless pipe rehabilitation. Trenchless rehabilitation for this area is recommended as either Pipe Bursting or Cured-In-Place Piping. Trenching is not an option as this would not be cost effective and provide the highest amount of property repair at the conclusion of the project. The project will include the replacement of gate valves and hydrants in addition to corporation stops, services from main to property line, and curb stop box and valves.

Pipe Bursting involves inserting a bursting head into the host pipe and forcing it through in order to fracture and expand the host pipe (See Figure 2). While the bursting head is pushed through the host pipe, the replacement pipe is pulled into place behind the bursting head (See Figure 3,4). Services, valves, and hydrant leads are then reconnected to the new pipe.

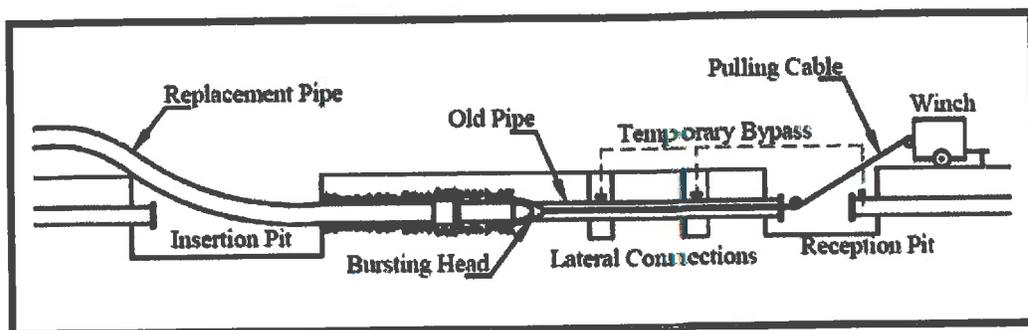


Figure 2 - Pipe Bursting Figure (Source: City of Santa Cruz)



Figure 3 - Burst Ductile Iron Pipe (Source: Ellingson Companies)



Figure 4 - Burst Ductile Iron Pipe (Source: Ellingson Companies)

Cured-in-Place Piping involves inverting a resin impregnated liner using air/steam or water. Once the liner has been inverted or pulled into place from manhole to manhole, steam or water is heated to allow the liner to 'cook' and harden to the shape of the interior of the host pipe. Services

are then re-established using a camera and robotic cutting unit. The new liner is then inspected with Closed Circuit Television (CCTV) and approved. (See Figure 5-7). A similar process is used to install cured-in-place manhole liners (CIPMHLs).



Figure 5 – Boiler Truck with CIPP Inversion Tower (Source: 1-MN-344 Interceptor Rehab)



Figure 6 - Application of Epoxy Resin to Manhole Liner (Source: 1-MN-344 Interceptor Rehab)



Figure 7 - Using Steam to Pressurize and Cure Resin (Source: 1-MN-344 Interceptor Rehab)



Figure 8 - Inspection of Manhole Liner (Source: 1-MN-344 Interceptor Rehab)

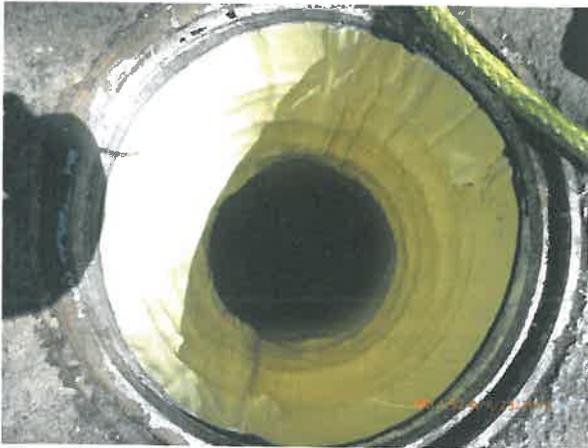


Figure 9 - Final Inspection of CIPMHL (Source: 1-MN-344 Interceptor Rehab)

Minnesota Department of Health will conduct a plan review of the project.

C. **Street Construction**

West Arm Road West

The proposed construction on West Arm Road West will begin at Shoreline Drive (CSAH-15) and terminate approximately 4600 West Arm Road West. The road section will be widened to the south and to allow for two 10-foot lanes. This will meet the minimum road width requirement for a Fire Apparatus Access Road as established by both NFPA and IFC. The existing street section will be reconstructed with a new typical section for 7-ton design. The new street section will include a combination of B612 concrete curb and gutter. The widening of the street will require the relocation of Xcel power poles approximately 10-15' south of their current locations along the south ROW line of West Arm Road West.

HCCRA Bridge Modifications

On May 20, 2019, the City Council requested that the Feasibility Report explore the option of modifying the Timber Construction Seton Channel Bridge that spans West Arm Road West, north of CSAH-15. The modification included the removal of the center wood pier in order to meet the minimum turning radius for fire service vehicles. The currently width and posted height clearance under Seton Channel Bridge is 12.5 feet and 13.5 feet, respectively. NPFA states, "*Fire apparatus access roads shall have an unobstructed width of not less than 20 feet and an obstructed vertical clearance of 13 feet 6 inches. Potential for accumulation of snow and ice should be factored into height requirements*". Since this is an area susceptible to accumulation of snow and ice during winter months, the bridge pier modification would do nothing to address the NPFA height requirement.

West Arm Road West Access Road

The proposed construction of the West Arm Road West Access Road will begin at Shoreline Drive (CSAH-15), align with the east side of PIN# 1811823330003 and terminate at West Arm Road West. The existing street section will be constructed with a new typical section for 7-ton design. The new street section will include a combination of B612 concrete curb and gutter as well as a concrete sidewalk or bituminous trail to connect Dakota Regional Trail to business on Shoreline Drive. The proposed construction will require the relocation of building located along the east side of the property.

Right-of-Way

It is anticipated that additional right-of-way will be needed for the project. In order to create a road that meets minimum standards with regard to allowable lane width, as well as meeting the requirements of the National Fire Protection Association, it is recommended, in the interest of Public Safety, that the City pursue the acquisition of additional right-of-way from HCCRA along the south side of West Arm Road West.

It is also recommended that the City pursue the acquisition of right-of-way along the east property line of the Minnetonka Drive-In property.

D. Storm Drainage

West Arm Road West

The proposed project will include installation of new storm sewer pipe and catch basins. The new system will capture flow and address spread issues in high intensity rain events. Sump catch basin structures will be utilized where appropriate to aid in the removal of sediment. The storm sewer will be designed to current City standards for a five-year storm event. No changes to the existing drainage patterns are proposed.

West Arm Road West Access Road

The proposed project will include new storm sewer system to meet current standards. This may include the addition of catch basins and storm pipe to capture flows created by the additional impervious area created by the access road. The new storm sewer would connect to the Hennepin County Storm System located along the north side of Shoreline Drive (CSAH-15). Sump catch basin structures will be utilized where appropriate to aid in the removal of sediment. The additional storm sewer will be designed to current City standards for a five-year storm event.

Minnehaha Creek Watershed District will conduct a plan review for the project.

4. IMPACT OF PROPOSED IMPROVEMENTS

The proposed street improvements will not create any new maintenance issues for the Public Works staff. Reconstruction of West Arm Road West will allow for a more consistent plowing section as the reconstructed road will eliminate the inconsistent road edge. The City will work with affected property owners and the Contractor to resolve any situation that may arise during construction. Short term traffic delays, construction dust and noise, and erosion will occur. Efforts to minimize these impacts include the restriction of work hours and dust and

erosion control measures included in the project. Any disruptions that occur to existing yards, sprinkler systems, and driveways will be restored.

Construction of the West Arm Road West Access Road will allow for West Arm Road west to have unrestricted fire service protection access. The access road will also allow connection from a Dakota Regional Trail to businesses located on Shoreline Drive as well as needed ADA improvements at the pedestrian crossing at Island Drive.

5. SUMMARY OF ESTIMATED PROJECT COSTS AND FUNDING

Project: 21815

Description: 2020 West Arm Road West Street and Utility Improvements

Cost Item	Percent	Amount
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Construction Costs

West Arm Road West	\$	716,900
West Arm Road West Access Road		<u>148,900</u>

Total Construction Costs		\$ 865,800
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Administrative Costs

Engineering	18%	\$	173,200
Assessment	1%		8,700
Legal	1%		8,700
Administration	1%		8,700
Capitalized Interest	1%		8,700
Bonding	1%		<u>8,700</u>

Total Administrative Costs		\$ 216,700
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TOTAL ESTIMATED PROJECT COSTS		\$ 1,082,500
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Temporary Funding Source

City Internal Funds

Permanent Funding Source

Assessments, MCES I&I Grant, General
Obligation Funds and Bonding

Funding

Total MCES I&I Grants	\$	45,000
Total Generation from Assessments	\$	98,200
Total Paid from General Obligation Bonds	\$	<u>939,300</u>

Total Funding	\$	1,082,500
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6. ASSESSMENT METHODOLOGY

It is proposed that the project be assessed over 10 years in accordance with the City's Assessment Policy. It is proposed to assess this project using the linear foot method for the commercial/industrial/high density residential properties and unit method for the residential properties. Proposed assessments are based on 25% of the entire cost of the reconstructed street section and storm infrastructure for residential properties and commercial/industrial/high density residential properties, and do not include costs for water main or sanitary sewer work.

See Exhibit No. 3 for the parcels proposed to be assessed and Exhibit No. 4 and 5 for the proposed assessment rolls.

7. FINANCE

The proposed project will be temporarily financed by the City. Permanent funding will be provided by the MCES I&I grant, City water and sewer utility funds, and the costs assessed to the benefiting parcels in accordance with current City Assessment Policy and Minnesota Statutes Chapter 429, Special Assessment Laws.

A. City Administrator Statement

With reference to this Feasibility Report for Improvement Project 21815 as prepared by Sambatek dated September 2, 2019, I find the following:

1. The project will be temporarily funded through existing City internal funds whereupon permanent financing will be obtained through the General Obligation Bonds, MCES I&I Grant, and Public Utility Funds, and assessments.
2. Sufficient moneys are currently available from the City's internal funds to temporarily fund the special assessment portion of the project. It is estimated that \$98,200 will be assessed.
3. Sufficient moneys are currently available from the City's Public Utility Funds to pay for proposed utility improvements for street reconstruction at an estimated cost of \$939,300.

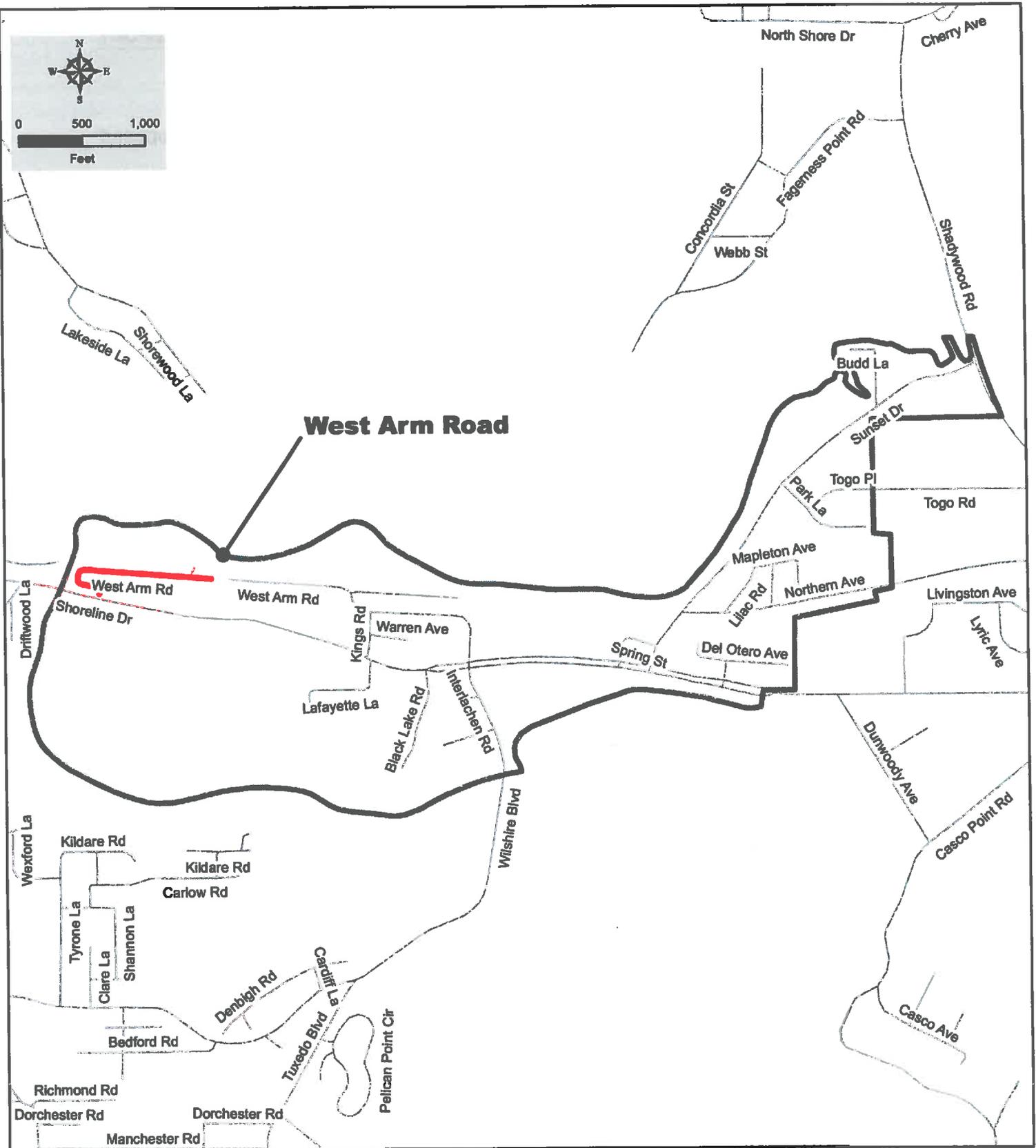
Dan Tolsma, City Administrator

8. PROJECTED SCHEDULE

August 19, 2019	Public Open House to discuss project and proposed assessments
September 2, 2019	Accept Feasibility Report Order Public Hearing
September 16, 2019	Hold Public Hearing Order Improvements Order Preparation of Plans and Specifications Approve Design and Construction Contracts
December 16, 2019	Department of Health Review Minnehaha Creek Watershed Review
April 6, 2020	Order Advertisement for Bids
April 27, 2020	Open Bids
May 4, 2020	Award Contract Begin Construction
October 2019	Complete Construction Assess Project
January 2021	First assessment payment due with real estate taxes

9. PROJECT FEASIBILITY AND RECOMMENDATION

The project as proposed is technically and financially feasible, cost effective, and will result in a benefit to the properties proposed to be assessed. It is recommended that the Council accept this report, hold the public hearing, and order the improvements.



Project Area (Proj. No. 21815)
2020 Street & Utility Improvement Project
City of Spring Park, Minnesota

Legend		 <small>This map was created using Sambatek's Geographic Information Systems (GIS). It is a compilation of information and data from various sources. This map is not a surveyed or legally recorded map and is intended to be used as a reference. Sambatek is not responsible for any inaccuracies contained herein.</small>
	Project Area	
	City Boundary	
	Hennepin County Roads	
Sources: MetroGIS, NRCS, LMIC		



West Arm Road Location Map

Project 21815
City of Spring Park

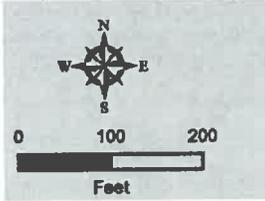
Legend

— Project Area



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Sources: MetroGIS, NRCS, LMIC



West Arm Road Assessment Map

Project 21815
City of Spring Park

Legend

-  Project Area
-  City Owned Parcels
-  High Density Residential Parcels
-  Single Family Residential Parcels

Sources: MetroGIS, NRCS, LMIC



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PROJECT 21815
STREET AND UTILITY IMPROVEMENT PROJECT
WEST ARM ROAD WEST
CITY OF SPRING PARK
EXHIBIT NO. 4 - HIGH DENSITY RESIDENTIAL PROPERTY
PROPOSED ASSESSMENT ROLL

ASSESSMENT RATE BREAKDOWN			
CONSTRUCTION COSTS*	\$865,808.00		
ADMINISTRATIVE COSTS	\$216,452.00	*(LEGAL, ADMIN, BONDING, ENGINEERING, CONSTRUCTION ADMIN)	
TOTAL STREET COSTS**	\$351,659.99	** (ASSESSED 25% FOR RECONSTRUCTS)	
TOTAL STORM COSTS***	\$41,217.00	*** (ASSESSED 25% FOR RECONSTRUCTS)	
TOTAL COST	\$392,876.99		
ASSESSMENT RATE	x25%	TOTAL SQUARE FOOTAGE	ASSESSMENT RATE PER SQUARE FOOT
ASSESSABLE COST	\$98,219.25 /	373325.0 SF	= \$0.26

HIGH DENSITY RESIDENTIAL PROPERTY

ASSESSMENT RATE		ASSESSABLE AREA		AMOUNT ASSESSED		ASSESSABLE RESIDENTIAL UNITS		ASSESSMENT RATE PER RESIDENTIAL LOT UNIT
\$0.26	X	56380.0 SF	=	\$14,658.80	/	20	=	\$732.94

PROPERTY PIN	PROPERTY ADDRESS	PROPERTY OWNER	ASSESSABLE RESIDENTIAL UNITS	ASSESSMENT RATE PER RESIDENTIAL LOT UNIT	PROPOSED ASSESSMENT
1811723320001	4734 WEST ARM ROAD	JAMES O'HEARN/SUSAN O'HEARN	1	\$732.94	\$732.94
1811723320002	4736 WEST ARM ROAD	BARBARA ELLEN ERICSON TRUST	1	\$732.94	\$732.94
1811723320003	4738 WEST ARM ROAD	JEANNINE M SCHULTZ	1	\$732.94	\$732.94
1811723320004	4740 WEST ARM ROAD	C D TIMBERG & K A TIMBERG	1	\$732.94	\$732.94
1811723320005	4742 WEST ARM ROAD	J & M SCRUTON	1	\$732.94	\$732.94
1811723320006	4744 WEST ARM ROAD	PHILLIP TULLBANE ETAL TRSTES	1	\$732.94	\$732.94
1811723320007	4746 WEST ARM ROAD	RYAN ROHRBACH	1	\$732.94	\$732.94
1811723320008	4748 WEST ARM ROAD	JEFFREY L HAGEN & K M HAGEN	1	\$732.94	\$732.94
1811723320013	4750 WEST ARM ROAD	THE PATRICIA A TIMBERG TRUST	1	\$732.94	\$732.94
1811723320014	4752 WEST ARM ROAD	M WEBER & T WEBER SUB/JL E	1	\$732.94	\$732.94
1811723320015	4754 WEST ARM ROAD	JOHN JUNTILLA/NANCY JUNTILLA	1	\$732.94	\$732.94
1811723320016	4756 WEST ARM ROAD	N L LUDEMANN & P J LUDEMANN	1	\$732.94	\$732.94
1811723320017	4758 WEST ARM ROAD	M E & C A GONIOR	1	\$732.94	\$732.94
1811723320018	4760 WEST ARM ROAD	EUGENE G MILLER REVOCABLE TR	1	\$732.94	\$732.94
1811723320019	4762 WEST ARM ROAD	BIRDIE LLC	1	\$732.94	\$732.94
1811723320020	4764 WEST ARM ROAD	H & J HURLEY	1	\$732.94	\$732.94
1811723320021	4766 WEST ARM ROAD	TROY EHLERS	1	\$732.94	\$732.94
1811723320022	4768 WEST ARM ROAD	CLIFFORD W DINSMORE ETAL	1	\$732.94	\$732.94
1811723320023	4770 WEST ARM ROAD	MARLIN E WIGGINS	1	\$732.94	\$732.94
1811723320024	4772 WEST ARM ROAD	JANICE M ANDERSON	1	\$732.94	\$732.94
TOTALS:			20		\$14,658.80

Option A

1	Sanitary / Water Trenchless Rehabilitation
5	Do Nothing for Road Improvement
7	Remove Center Bridge Pier
8	Obtain Fire Easement on Private Property
Pros:	Addresses utility improvement needs, can improve turning radius at bridge, meets IFC requirement for a turn-around area
Cons:	Does not meet IFC requirements for road width and height. Aging pavement and drainage not addressed. Lack of conformance to IFC still poses risk to public safety, property, and human life. Removal of center bridge pier may not be possible due to bridge joints located directly over the center pier.
Sanitary:	2070 Next Recommended Improvement
Water:	2070 Next Recommended Improvement
Street:	2020-2025 Next Recommended Improvement, Pavement Life Cycle Recommends Reconstruct in 2004
Storm:	2020-2025 Next Recommended Improvement

Estimated Construction Cost:	\$ 421,915
Engineering , Admin, Legal, Construction Admin	\$ 105,479
Total:	\$ 527,394

Option B

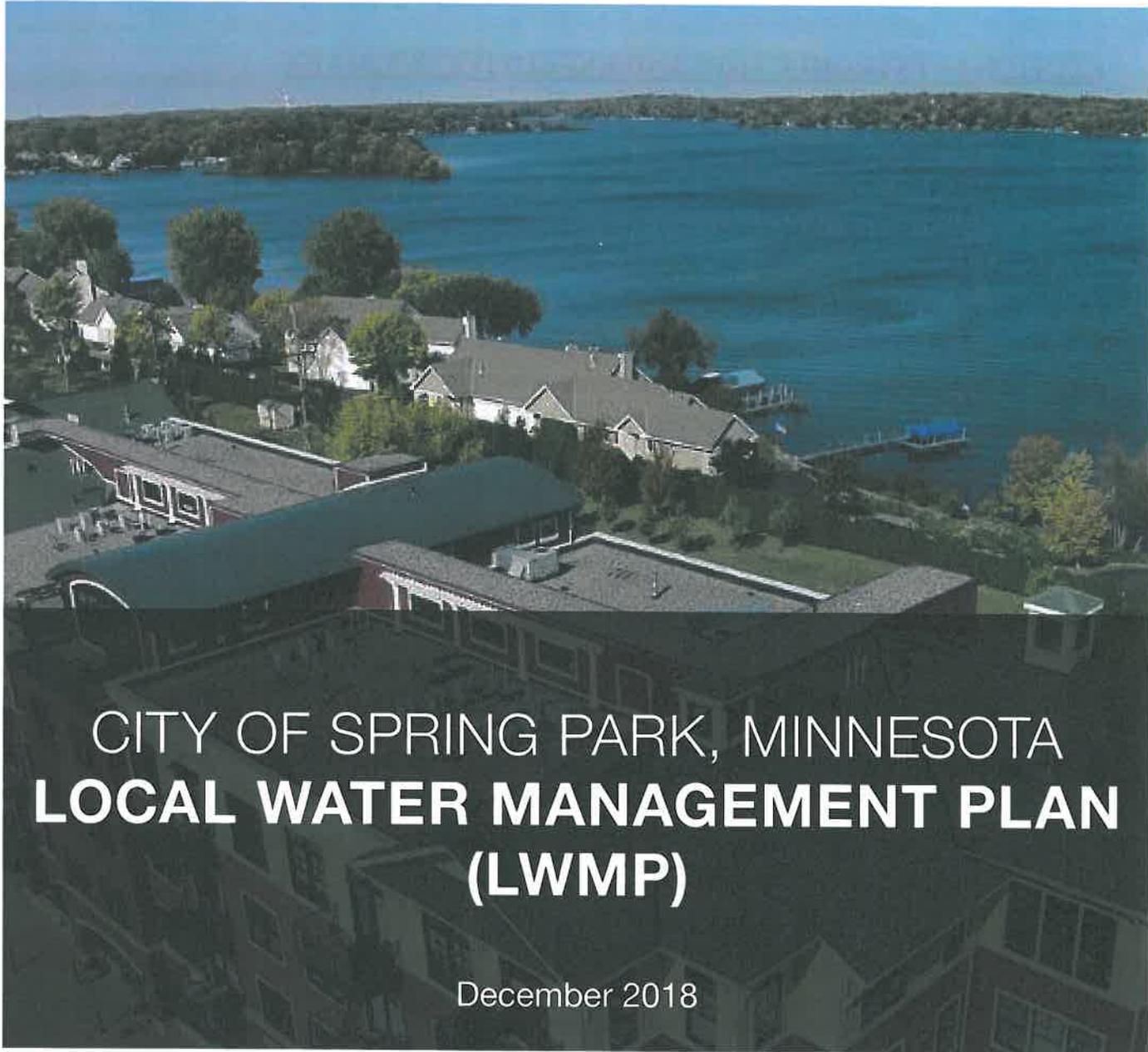
1	Sanitary / Water Trenchless Rehabilitation
3	Reconstruct Road with C&G, Widen to South, Improve Storm System
8	Obtain Fire Easement on Private Property
Pros:	Addresses utility improvement needs. Meets IFC requirement for a turn-around area. Addresses street and drainage improvement needs. Meets IFC requirements for road width.
Cons:	Does not meet IFC requirements for road height. Lack of conformance to IFC still poses risk to public safety, property, and human life. Cost on acquisition of HCRRA ROW could be cost prohibitive.
Sanitary:	2070 Next Recommended Improvement
Water:	2070 Next Recommended Improvement
Street:	2040 Pavement Life Cycle Recommends Overlay in 2040
Storm:	2040 Next Recommended Improvement

Estimated Construction Cost:	\$ 753,900
Engineering , Admin, Legal, Construction Admin	\$ 188,475
Total:	\$ 942,375

Option C

1	Sanitary / Water Trenchless Rehabilitation
3	Reconstruct Road with C&G, Widen to South, Improve Storm System
6	Access Road at Island Drive
Pros:	Addresses utility improvement needs. Meets IFC requirement for a turn-around area. Addresses street and drainage improvement needs. Meets IFC width/height requirements. Provides trail connectivity between Regional Trail and Spring Park business. Provides future opportunity of additional ADA crossing.
Cons:	Cost of acquisition of HCRRRA ROW could be cost prohibitive. Cost of Access Road ROW could be cost prohibitive.
Sanitary:	2070 Next Recommended Improvement
Water:	2070 Next Recommended Improvement
Street:	2040 Pavement Life Cycle Recommends Overlay in 2040
Storm:	2040 Next Recommended Improvement

Estimated Construction Cost:	\$ 865,800
Engineering , Admin, Legal, Construction Admin	\$ 216,450
Total:	\$ 1,082,250



CITY OF SPRING PARK, MINNESOTA LOCAL WATER MANAGEMENT PLAN (LWMP)

December 2018



SECTION I – INTRODUCTION AND EXECUTIVE SUMMARY

A. Introduction

The City of Spring Park has prepared this Local Water Management Plan (LWMP) in accordance with MN Statute 103B.235 for Local Water Management Plans. This LWMP provides the City and its residents with direction concerning the administration and implementation of water management activities within the community. The LWMP inventories City land and water resources and presents water management policies and goals, which address both known surface water-related problems and concerns about future development activities. The LWMP also presents the information needed to comply with the requirements of the federal, state and regional regulatory agencies involved in surface water management.

A.1 Policy Statement: The City of Spring Park is committed to a goal of no adverse impact or non-degradation for the area surface and ground waters. To accomplish this goal the City will demonstrate through the LWMP:

- Performance measures for all proposed stormwater treatment devices.
- Proposed plans and projects that will require stormwater management rate control, volume control and erosion control Best Management Practice (BMP protection) measures that will require City and Minnehaha Creek Watershed District (MCWD) permitting approval prior to construction.
- Performing proper maintenance for Public Works activities such as street sweeping, clean-up of City parkland, and manhole sump cleaning.
- Public education on water resource management.
- Construction site inspection and enforcement of stormwater BMPs.
- Providing necessary funds to implement the stormwater management plan.
- Implementation of a phosphorus loading reduction plan to help protect and preserve the Lake Minnetonka water resources.

A.2. To adopt by reference the Minnehaha Creek Watershed District's (MCWD) "Watershed Management Plan", Rules and Regulations as part of Spring Park's "Surface Water Management Plan" and to provide the localized information necessary to supplement the District's plan.

- A.3** To authorize the MCWD to continue to apply all of its permitting rules and regulations in the City of Spring Park including but not limited to: Erosion Control, Floodplain Alteration, Wetland Protection, Dredging, Shoreline and Streambank Stabilization, Waterbody Crossings and Structures, Stormwater Management, Sandblanket Installation, Enforcement, Variances and Exceptions, Fees, and Financial Assurances.
- A.4** To authorize the MCWD to be the “local unit of government” responsible for implementing the Minnesota Wetlands Conservation Act within the City of Spring Park.
- A.5** To adopt by reference the 2040 City of Spring Park Comprehensive Plan.

B. Purpose

The general purpose and objectives of the City of Spring Park LWMP are as follows:

- B.1** Promote infiltration of stormwater where feasible to improve water quality, reduce flow volumes, and increase ground water recharge.
- B.2** Promote activities that maintain, support, and enhance the quantity and ecological integrity of aquatic and upland resources.
- B.3** Preserve, maintain, and improve aesthetic, physical, chemical, and biological composition of the Lake Minnetonka resource.
- B.4** Minimize the risks of threats to public health through the development of programs, plans, and policies that preserve the quality of surface and ground waters.
- B.5** Preserve the natural appearance of shorelines and minimize degradation of shorelines and water quality resulting from dredging operations.
- B.6** Promote Best Management Practices (BMPs) to improve water quality.
- B.7** Enhance public participation and knowledge by providing informational and educational material to the residents, businesses, developers, and contractors.
- B.8** Preserve, create, and enhance wetland resources to maximize benefits and functionality to the City and Lake Minnetonka.
- B.9** Promote aquifer protection.
- B.10** Protect and preserve the Lake Minnetonka floodplain.

- B.11** Control temporary sources of sediment resulting from land disturbance, minimize and correct the effects of sedimentation from erosion prone and sediment source areas.
- B.12** Promote effective planning to minimize the impact of development and land use change on Spring Park's water resources.
- B.13** Solicit public input with the intent that water resource policies, projects and programs will address the local values and goals. Strive to manage and make water resource decisions based on an educated public.

C. Regulatory Requirements

In 1982, the Minnesota Legislature adopted The Metropolitan Surface Water Management Act requiring all watersheds within the Twin Cities seven county metropolitan area to be incorporated into Watershed Districts and Watershed Management Organizations and the preparation and adoption of watershed management plans by each. The Act also requires that Local Governmental Units prepare Local Water Management Plans which include the official controls and capital improvements necessary to bring each local surface water management into conformance with its respective Watershed District or WMO plan.

The City of Spring Park is located within the Minnehaha Creek Watershed District and also within the Lake Minnetonka sub-watershed basin. The City of Spring Park LWMP is intended to meet the requirements of the following regulatory documents:

- C.1** Minnehaha Creek Watershed District (MCWD) "Watershed Management Plan" and "Permitting Rules and Regulations";

The MCWD maintains a regulatory program requiring development and redevelopment projects to treat and control the rate of stormwater discharge through the use of BMPs. Projects must apply for and obtain MCWD permits prior to the start of construction. Detailed information and permits can be found online at the MCWD's website: www.minnehahacreek.org.

- C.2** Metropolitan Surface Water Management Act - Minnesota Statutes Chapter 103B;
- C.3** Metropolitan Area Local Water Management - Minnesota Rules Chapter 8410;
- C.4** Minnesota Wetland Conservation Act of 1991 and subsequent rules and amendments;

- C.5** State and Federal laws pertaining to National Pollution Discharge Elimination System (NPDES);

The MPCA requires the submittal of an NPDES permit by the City of Spring Park. This is to limit the discharge of pollutants in stormwater runoff as well as permits authorization of stormwater discharge from the MS4. Through the MPCA a Storm Water Pollution Prevention Plan (SWPPP) is required. The SWPPP provides practices for meeting the requirements of the NPDES permit.

- C.6** (NPDES) permitting for stormwater outfalls to designated drainage ways;

- C.7** Erosion Control Guidelines and Best Management Practices prepared by the Minnesota Pollution Control Agency;

The MPCA administers multiple NPDES permit programs, including stormwater and MS4. The MPCA also oversees Minnesota's impaired waters and facilitates TMDL plans and reports. The MPCA enforces laws regarding pollution of Minnesota's water. Section 401 certification is required to receive federal permits for any activity that results in discharges to navigable waters in the United States. Applications, NPDES permits and SWPPP information can be found online on their website: www.pca.state.mn.us.

- C.8** Regulations of the Lake Minnetonka Conservation District.

- C.9** State Shoreland Management Law

D. Water Resource Management Related Agreements

- D.1** MCWD "Memorandum of Understanding": The City of Spring Park currently has a "Memorandum of Understanding" with the MCWD. The terms of the agreement is the understanding that the City of Spring Park agrees to authorize the MCWD permitting authority in all areas regulated by the District and all City stormwater management controls are as protective as the District's.

- D.2** Lake Minnetonka Conservation District: The City of Spring Park is a participating City member of the Lake Minnetonka Conservation District. Spring Park has an appointed representative who reports monthly to the City Council.

E. Executive Summary of Local Water Management Plan Content

The City of Spring Park's LWMP has been developed to meet the needs of the community and address the management planning requirements of the Metropolitan Surface Water Management Act and MCWD Watershed Management Plan. The LWMP has been prepared in general accordance with Minnesota Rules Chapter 8410 and follows the plan outline identified in the rules.

The following summaries identify the major sections of the LWMP and where information can be located in the plan document:

E.1 Section I - Executive Summary:

This section presents an introduction for, and summary of, all of the sections of the Surface Water Management Plan. This section also summarizes strategic recommendations for consideration by the City in implementing the LWMP.

E.2 Section II - Land and Water Resource Inventory:

This section categorizes a wide range of information under the subsections entitled Physical Environment, Human Environment and Surface Water System. The sub-sections provide information and references regarding water resources and physical factors within the City of Spring Park including the following:

- Location
- Precipitation data for hydrologic/hydraulic review and design
- Geologic and topographic information
- Surface soils and groundwater information
- Land Erosion (Runoff) Susceptibility
- Unique features and scenic areas
- Land use and public utility services
- Water-based recreational areas and land ownership
- Potential pollutant sources
- Public waters and wetlands
- Flood Insurance Studies and surface water drainage information

- City sub-watersheds and storm water modeling data, limitations and results
- Flood problem areas and surface water quality

E.3 Section III – Establishment of Policies and Goals:

This section outlines goals and policies addressing specific water resource management needs of the City and their relationship with the MCWD, Regional, State, and Federal goals and programs. Goals and policies relating to the following issues are presented:

- Water quantity
- Water quality
- Erosion and sedimentation
- Wetlands
- Groundwater
- Recreation, fish and wildlife
- Enhancement of public participation

E.4 Section IV - Assessment of Problems and Corrective Actions

This section provides an assessment of existing or potential water resource related problems within the City. This section also describes potential structural, nonstructural and programmatic solutions on corrective actions to the identified problems.

E.5 Section V – Implementation Program

This section identifies the regulatory controls, management programs, storm water design and performance standards, and capital improvements to be utilized by the City in implementing this LWMP.

E.6 Section VI – Implementation Priorities and Financial Considerations

This section presents improvement priorities and financial considerations that can be reasonably funded and implemented by the City in the near and longer-term future. This section also identifies the estimated costs and potential funding sources for implementing the proposed regulatory controls and programs.

E.7 Section VII – Stormwater Management and Erosion Control Standards

This section addresses stormwater management and erosion control standards the City should adopt and enforce when new development or re-development occurs. Implementation of these standards will help to minimize the impact of stormwater runoff from a site and to receiving downstream waters.

E.8 Section VIII – Amendment Procedures

This section presents the process for making amendments consistent with the future MCWD plan.

F. Recommendations

The following recommendations are presented for the City’s consideration based upon the information compiled for this LWMP:

- F.1** To complete an update of the City Ordinance, Codes and Guidelines to be in conformance with MCWD Rules and Regulations for stormwater .management, shoreland alterations, floodplain district and wetland district.
- F.2** Confirm and execute all legal agreements determined necessary to assure the partnership between the MCWD and the City of Spring Park.
- F.3** To review the Zoning Development Ordinance from a water resource perspective in order to determine opportunities to enhance water resource protection.
- F.4** The LWMP should be used to guide future water resource management decisions and stormwater related issues in existing and projected urban growth areas.
- F.5** The City should examine existing and potential funding sources available for implementing stormwater regulatory controls and improvements.
- F.6** The City should consider the additional staff time and financial resources required to implement this LWMP and develop additional revenue sources and budget accordingly.
- F.7** To continue water resource educational programs and partner with the MCWD, Lake Minnetonka Conservation District (LMCD), other lakeside communities and other agencies to provide educational opportunities for the community.

- F.8** The LWMP provides a general framework for addressing existing and future surface water management issues within the City. Additional studies may be required when specific development proposals are prepared.
- F.9** The City should consider preparation of a wellhead protection plan as a protection measure for the City's water supply and the regional ground water resource.



MEMO

2020 LEVY & BUDGET

1. **BACKGROUND:** Every Year the City Council is required to establish a preliminary levy and a final levy. For 2020 cities have until September 30th to certify their preliminary levy. At the same meeting that the preliminary levy is approved the council must also establish the date and time for a truth in taxation hearing that must take place between November 25th and December 28th, at which time the budget and final levy will be discussed and public input will be allowed. Following the truth in taxation hearing and before December 28th the council must adopt the 2020 budget and certify the final levy.
2. **2019 YEAR TO DATE REVENUE & EXPENDITURES:** For 2019 revenues and expenditures have been tracking closely to budgeted amounts throughout the general, water, and sewer funds. Specifically, the general fund is currently at 53.37% (revenue) and 83.08% (expenditures) of budget, water department is currently at 63.92% (revenue) and 59.88% (expenditures) of budget, and the sewer department is currently at 54.57% (revenue) and 66.97% (expenditures). It's important to note that the reason general fund revenue lags behind expenditures is simply because the majority of the City's revenue comes in two payments from the County, the first in July and the second in December.
3. **2020 PRELIMINARY LEVY & NOTABLE BUDGET LINE ITEMS:** The preliminary version of the 2020 budget has a levy increase of \$57,344. This amounts to a 5.4% increase, bringing the levy total to \$1,128,501. Notable line items are listed below.
 - Fire service contract is increasing from \$150,750 to \$158,831.
 - Police service contract changes are expected to increase from \$434,000 to \$447,000.
 - Election administration costs are expected to be \$7,000 for the 2020 elections.
 - Semi-annual cleanup costs continue to increase and are expected to cost \$25,000 in 2020.
 - Snow removal budget has increased from \$40,000 to \$55,000.
 - General fund bond payment amount will decrease slightly from \$128,000 to \$127,250.
 - Overall, the total General Fund Budget is increasing from \$1,293,800 to \$1,325,801, or 2.5%

City of Spring Park

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2020 DRAFT BUDGET SUMMARY

GENERAL FUND

Revenue

Property Tax Levy	\$1,128,501
Payments in Lieu of Taxes	\$39,000
Licenses & Permits	\$26,600
Zoning & Building Fees	\$39,000
Grants & Aid	\$7,200
Recycling Fees	\$13,000
Fines	\$10,000
Special Assessments	\$5,000
Miscellaneous	\$17,500
Transfer from Reserves	\$40,000
Total	\$1,325,801

Expenditures

Police	\$465,750
Fire	\$158,831
Public Works	\$180,750
Administration	\$197,020
Contracted Services (Planner, Attorney, Assessor & Building Official)	\$113,950
Parks & Recreation	\$28,250
Waste Services	\$48,000
Debt Service	\$127,250
Total	\$1,325,801

WATER & SEWER FUNDS

Revenue

Charges for Service	\$885,000
Miscellaneous	\$12,500
Interest Earnings	\$25,000
Lease Revenue	\$48,800
Transfer from Reserves	\$32,341
Total	\$1,003,641

Expenditures

Contracted Services (PeopleService)	\$90,000
Operations & Maintenance	\$379,550
Depreciation	\$182,800
Met Council Sewer Charges	\$211,791
Debt Service	\$139,500
Total	\$1,003,641