

AGENDA
SHAKOPEE PUBLIC UTILITIES COMMISSION
REGULAR MEETING
NOVEMBER 5, 2018

1. **Call to Order** at 5:00pm in the SPUC Service Center, 255 Sarazin Street.
2. **Approval of Minutes**
3. **Communications**
4. **Approve the Agenda**
5. **Approval of Consent Business**
6. **Bills: Approve Warrant List**
7. **Liaison Report**
8. **Reports: Water Items**
 - 8a) Water System Operations Report – Verbal
9. **Reports: Electric Items**
 - 9a) Electric System Operations Report – Verbal
 - 9b) Resn. #1216 – Adopting the Electric Service Rules and Regulations of the Shakopee Public Utilities Commission and Providing For General Administration
 - 9c) MMPA Board Meeting Public Summary – October 2018
10. **Reports: Human Resources**
11. **Reports: General**
 - 11a) Semi-Final Capital Improvement Plan for 2019-2023
12. **New Business**
13. **Tentative Dates for Upcoming Meetings**

- Mid Month Meeting	--	November 19
- Regular Meeting	--	December 3
- Mid Month Meeting	--	December 17
- Regular Meeting	--	January 7, 2019
14. **Adjourn to 11/19/18** at the SPUC Service Center, 255 Sarazin Street

MINUTES
OF THE
SHAKOPEE PUBLIC UTILITIES COMMISSION
(Regular Meeting)

President Weyer called the regular session of the Shakopee Public Utilities Commission to order at the Shakopee Public Utilities meeting room at 5:00 P.M., October 15, 2018.

MEMBERS PRESENT: Commissioners Joos, Amundson, Meyer and Weyer. Also present, Liaison Mocol, Utilities Manager Crooks, Finance Director Schmid, Planning & Engineering Director Adams, Electric Superintendent Drent, Water Superintendent Schemel and Marketing/Customer Relations Director Walsh.

Motion by Amundson, seconded by Joos to approve the minutes of the October 1, 2018 Commission meeting. Motion carried.

There were no Communication items to report.

President Weyer offered the agenda for approval.

Motion by Meyer, seconded by Joos to approve the agenda as presented. Motion carried.

Motion by Amundson, seconded by Joos to approve the Consent Business agenda as presented. Motion carried.

President Weyer stated that the Consent Item was: Item 8c: Monthly Water Production Dashboard.

The warrant listing for bills paid October 15, 2018 was presented.

Motion by Joos, seconded by Meyer to approve the warrant listing dated October 15, 2018 as presented. Motion carried.

Liaison Mocol presented her report. The annual budget process continues with the Council. It is expected the Southbridge development agreement will be decided at the next Council meeting.

Water Superintendent Schemel provided a report of current water operations. Hydrant flushing has been suspended with the number of construction projects trying to complete work before significant changes in the weather. Updates to those projects were detailed.

Mr. Schemel provided a Windermere Booster Station update. The City of Shakopee granted a CUP approval for the project on October 4. The Commission was presented reasons that there will be a delay in the construction of Well #23. Water quality testing will be taking place with the test/irrigation well located on the site of the project to gather more detailed results.

Item 8c: Monthly Water Production Dashboard was received under Consent Business.

Electric Superintendent Drent provided a report of current electric operations. Two electric outages were reviewed. An update was provided on the LED conversion project with street lights. A potential to provide mutual aid was discussed for the hurricanes that hit Florida and North Carolina. Construction projects were updated and discussed.

Planning and Engineering Director Adams presented the final draft of the Electric Service Rules and Regulations aka Electric Policy Manual. With no further changes or modifications, a resolution approving the document will come back at the next Commission meeting.

Utilities Manager Crooks reviewed the arrangement to provide electric service to the Shakopee Energy Park.

Motion by Meyer, seconded by Joos to offer Resolution #1213. A Resolution Modifying Resolution #1100 by Establishing Wholesale Electric Rates to Shakopee Energy Park - 2017. Ayes: Commissioners Meyer, Amundson, Joos and Weyer. Nay: none. Motion carried. Resolution passed.

Motion by Joos, seconded by Meyer to offer Resolution #1214. A Resolution Modifying Resolution #1100 by Establishing Wholesale Electric Rates to Shakopee Energy Park - 2018. Ayes: Commissioners Amundson, Joos, Weyer and Meyer. Nay: none. Motion carried. Resolution passed.

Motion by Joos, seconded by Meyer to offer Resolution #1215. A Resolution Amending Resolution #1010 Adopting Utility Deposits for The Shakopee Public Utilities. Ayes: Commissioners Joos, Amundson, Meyer and Weyer. Nay: none. Motion carried. Resolution passed.

The September 2018 Financial Results were presented by Finance Director Schmid.

The election of the Interim SPU Vice President took place and Commissioner Joos was elected for the position.

The tentative commission meeting dates of November 5 and November 19 were noted.

Motion by Joos, seconded by Meyer to adjourn to the November 5, 2018 meeting. Motion carried.



Commission Secretary: John R. Crooks

RESOLUTION #1216

ADOPTING THE ELECTRIC SERVICE RULES AND REGULATIONS
OF THE SHAKOPEE PUBLIC UTILITIES COMMISSION
AND PROVIDING FOR GENERAL ADMINISTRATION

WHEREAS, it is deemed to be of benefit to have assembled into a comprehensive document the policies of the Shakopee Public Utilities Commission applicable to accessing electric service from the Shakopee Public Utilities electric system; and

WHEREAS, it is necessary to provide a balance between firm regulations and some degree of flexibility to respond to unforeseen circumstances or new technologies; and

WHEREAS, it is necessary to provide for administration of such policies by providing a framework for interpretation and routine modifications of details; and

WHEREAS, it is necessary to provide for timely adjustments of rates, fees, and charges.

NOW THEREFORE, BE IT RESOLVED that the Shakopee Public Utilities Commission Electric Service Rules and Regulations adopted by this resolution is applicable to all electric service requested or supplied by connection to the Shakopee Public Utilities electric system.

BE IT FURTHER RESOLVED that the Electric Service Rules and Regulations is represented as a faithful attempt at compiling policies, however the Shakopee Public Utilities Commission reserves the right to adopt policies without being limited by this resolution or by the Electric Service Rules and Regulations.

BE IT FURTHER RESOLVED that adjustment of rates, fees, and charges covered by the Electric Service Rules and Regulations may be implemented by Commission action from time to time.


BE IT FURTHER RESOLVED that the Utilities Manager or his delegate is charged with the administration of all policies including interpretations, routine modifications, or details.

BE IT FURTHER RESOLVED that the assessment rights of the City of Shakopee under state law are not compromised by this Resolution.

BE IT FURTHER RESOLVED that all things necessary to carry out the terms and purpose of this Resolution are hereby authorized and performed.

Adopted in Regular Session of the Shakopee Public Utilities Commission, this 5th day of November, 2018.

**SHAKOPEE PUBLIC UTILITIES
MEMORANDUM**

TO: SHAKOPEE PUBLIC UTILITIES COMMISSION
FROM: JOHN R. CROOKS, UTILITIES MANAGER 
SUBJECT: OCTOBER 2018 MMPA BOARD MEETING PUBLIC SUMMARY
DATE: OCTOBER 31, 2018



The Board of Directors of the Minnesota Municipal Power Agency (MMPA) met on October 23, 2018 at the offices of Shakopee Public Utilities.

The Board was updated on the status of repairs to Faribault Energy Park from a tornado that hit the plant on September 20.

The Board discussed the status of several renewable projects that the Agency is pursuing.

An expanded rollout of the high school component of MMPA's Energy Education program is underway. This offering is a companion to the fourth grade FEP Tour Event Assembly programs in which more than 15,000 students have participated since the program's inception.

SHAKOPEE PUBLIC UTILITIES
MEMORANDUM

TO: John Crooks, Utilities Manager 
FROM: Joseph D. Adams, Planning & Engineering Director 
SUBJECT: Semi-Final Capital Improvement Plan for 2019-2023
DATE: October 26, 2018

ISSUE

The Semi-Final Capital Improvement Plan for 2019-2023 is submitted for consideration by the Commission at their November 5, 2018 meeting. I will present the plan and take questions during the meeting.

**Shakopee Public Utilities
Capital Improvement Plan
Semi-Final
Dated: October 26, 2018
Administrative Summary**

Item Description		Justification	2018 Carryover	2019	2020	2021	2022	2023
1	General Office Equipment	See detail	-	147,700	140,000	100,000	100,000	100,000
2	Hardware	See detail	-	324,356	155,800	260,878	197,450	230,450
3	Software	See detail	-	32,000	30,000	30,000	30,000	30,000
4								
5	Total Administrative		\$0	\$504,056	\$325,800	\$390,878	\$327,450	\$360,450
6								
7	Cumulative Total Administrative		\$0	\$504,056	\$829,856	\$1,220,734	\$1,548,184	\$1,908,634
		Electric	\$0	\$378,042	\$244,350	\$293,159	\$245,588	\$270,338
		Water	\$0	\$126,014	\$81,450	\$97,720	\$81,863	\$90,113

**Shakopee Public Utilities
Capital Improvement Plan
Semi-Final
Dated: October 26, 2018
Administrative Detail**

	Type	Item	Source of Request	Justification	Qty	Unit Cost	2018 Carryover	2019	2020	2021	2022	2023
1	Gen Office Equipmt	Electronic White Board/Projector/Lap Top - Conference Room B	Plan/Eng	Map Display for Engineering Meetings/Presentations			-	12,400	-	-	-	-
2	Gen Office Equipmt	File shelving/Scanning Equipment	F&A	Record retention (10 shelf units at \$500/2 scanners at \$2,000 ea)			-	9,000	-	-	-	-
3	Gen Office Equipmt	Cube Build Out	F&A	Staff Addition				7,000				
4	Gen Office Equipmt	Electronic White Board/Projector/Lap Top - Training Room	Plan/Eng, Water, Electric	Map Display for Meetings/Presentations/Training/Conferences			-		15,000	-	-	-
5	Gen Office Equipmt	Copier & Fax Upgrades	F&A - IT	Replace Aging Equipment	3	10,000	-	30,000	-	-	-	-
6	Gen Office Equipmt	Commission Room Interactive Display Solution	Plan/Eng	Map Display for Meetings/Presentations/Training/Conferences			-	7,000		-	-	-
7	Furn & Equipment	Standing workstation	F&A-IT/Cust Svc/Eng/Admin	Employee Health and Wellness	17	900	-	15,300	-	-	-	-
8	Furn & Equipment	Office Chairs	F&A	Replace service center office chairs - aging equipment	65	800	-	52,000	-	-	-	-
9	Furn & Equipment	Commission Room AV Equipment	F&A - IT	Upgrade Commission Room AV Equipment & Microphones			-	-	100,000		-	-
10	Gen Office Equipmt	General office equipment	F&A - IT	General equipment replacements			-	15,000	25,000	100,000	100,000	100,000
11	Total General Office Equipment						-	147,700	140,000	100,000	100,000	100,000
12	Hardware	Replacement computers	F&A - IT	Replace aging Equipment & 2 staff additions in Finance & Eng	14	1,000	-	14,000	14,000	14,000	14,000	14,000
13	Hardware	Miscellaneous Hardware	F&A - IT	Future planning			-	-	50,000	125,000	125,000	125,000
14	Hardware	I series Server Replacement	F&A - IT	Replace aging equipment			-	-		50,000	-	-
15	Hardware	Spare Equipment	F&A - IT	Spare Equipment for emergency replacement(monitors/printers/etc)			-	3,000	3,000	3,000	3,000	3,000
16	Hardware	Server room UPS maintenance/battery replacement	F&A - IT	Uninterrupted power supply & battery back up replacement	1	2,000	-	2,000	2,000	2,000	2,000	2,000
17	Hardware	Web Server	Marketing	Hosted Web Solutions - Customer Service Improvement	1		-	30,000	-	-	-	-
18	Hardware	Remit Plus Scanners - Payment Processing	Cust. Service	Scanner Replacements	3	4,000	-	-	12,000		-	-
19	Hardware	Tablets for Trucks	Electric	2nd phase of data maps in the field	8	600	-	-	4,800	-	-	-
20	Hardware	Electric SCADA Disk Drives	Electric	Redundancy	2	500	-	1,000		-	-	-
21	Hardware	Wireless System Upgrade/Replacement	F&A - IT	Replace aging equipment			-	-	-	-	-	25,000
22	Hardware	Fiber Ring /INET Connectivity	F&A - IT	Connectivity/Redundancy for systems/remote sites			-	78,000	50,000	50,000	50,000	50,000
23	Hardware	Network Switches	F&A - IT	Future Standard Replacement Cycle			-	-	20,000		-	-
24	Hardware	ShoreTel Phones	F&A - IT	Replace aging phones - compatible with Mitel	10	400	-	4,000	-	-	-	-
25	Hardware	Phone System Replacement	F&A - IT	Current system no longer supported by end of 2019			-	75,000	-	-	-	-
26	Hardware	VMware HP DL380p Server - Add Host machine	F&A - IT	To meet capacity needs (could move to 2020 if needed)				75,000		-	-	-
27	Hardware	AS400 iSeries DR Solution Cybernetics iGuard Replication	F&A - IT	Position for Disaster Recovery & Backup/replication appliance to CPS Data Center. DR VPN Tunnel Access			-	26,356	-	-	-	-
28	Hardware	NAS Backup Device	F&A - IT	Replacement of existing equipment	1	6,000	-	6,000	-	-	-	-
29	Hardware	Vmware/Windows Backup and Disaster Recovery - Unitrends	F&A - IT	Future maintenance contracts for Vmware system			-	-		16,878	3,450	3,450
30	Hardware	Water Scada System Replacements	Water	Server/Workstation 6 years old/needs upgrade to Windows 10	2	4,000		8,000				8,000
31	Hardware	Lobby - Replace IPAD Kiosk	F&A - IT	Improved Customer Service	1	2,000	-	2,000		-	-	-
32	Total Hardware						-	324,356	155,800	260,878	197,450	230,450
33	Software	Software	F&A - IT	Misc/Future budgeting			-	15,000	30,000	30,000	30,000	30,000

Shakopee Public Utilities
Capital Improvement Plan
Semi-Final
Dated: October 26, 2018
Administrative Detail

Type	Item	Source of Request	Justification	Qty	Unit Cost	2018 Carryover	2019	2020	2021	2022	2023
34	Software	Microsoft Client License - CALS	Electric	Client License needed to add email & SPAM filter at user level	50	100	-	5,000	-	-	-
35	Software	Microsoft Windows Server 2016 Datacenter Lic	F&A - IT	Vmware Microsoft server licenses	2	6,000	-	12,000	-	-	-
36	Total Software					-	32,000	30,000	30,000	30,000	30,000
37	Total CIP Expenditures - Administration					-	504,056	325,800	390,878	327,450	360,450
38	Cumulative CIP Expenditures - Administration					-	504,056	829,856	1,220,734	1,548,184	1,908,634

**Shakopee Public Utilities
Capital Improvement Plan
Semi-Final
Dated: October 26, 2018**

Electric Summary

Item Description	Justification	2018 Carryover	2019	2020	2021	2022	2023
<u>Operating Fund</u>							
<u>System Projects</u>							
Miscellaneous	See Detail	-	175,000	175,000	175,000	175,000	175,000
System Material & Facilities	See Detail	-	684,500	560,000	495,000	510,000	495,000
Vehicles/Equipment	See Detail	-	480,500	351,000	395,000	460,000	550,000
<u>Local Area Projects</u>							
New UG Cables & Related Cost (Net of Contribution)	See Detail	-	350,000	350,000	400,000	400,000	450,000
Replace UG Cable Projects	See Detail	-	135,000	75,000	75,000	75,000	75,000
Rebuild OH Lines	See Detail	-	275,000	437,500	275,000	275,000	250,000
<u>Major System Projects</u>							
Feeder Extension Projects	See Detail	-	1,643,750	585,000	303,750	542,750	1,157,750
Convert OH to UG	See Detail	-	250,000	35,000	-	-	-
Territory Acquisition	See Detail	-	350,000	100,000	100,000	100,000	100,000
Shakopee Substation	See Detail	-	110,000	-	-	-	-
South Shakopee Substation	See Detail	-	46,000	-	30,000	-	-
Pike Lake Substation	See Detail	-	80,000	-	-	-	-
Dean Lake Substation	See Detail	-	21,000	105,000	-	-	-
East Shakopee Substation	See Detail	-	350,000	-	-	-	-
West Shakopee Substation	See Detail	-	650,000	-	200,000	4,400,000	-
Upgrade Projects	See Detail	-	320,000	290,000	200,000	210,000	220,000
ADVANCED METERING INFRASTRUCTURE (AMI)	See Detail	-	50,000	1,770,000	1,820,000	1,700,000	-
Service Center	See Detail	-	160,000	125,000	3,045,000	45,000	4,052,000
Total Operating Fund		-	6,130,750	4,958,500	7,513,750	8,892,750	7,524,750
<u>Relocation Fund</u>							
Relocation Projects	See Detail	-	112,500	342,750	232,500	52,000	384,000
Total Relocation Fund		-	112,500	342,750	232,500	52,000	384,000
Total Electric		-	6,243,250	5,301,250	7,746,250	8,944,750	7,908,750
Cumulative Total Electric			6,243,250	11,544,500	19,290,750	28,235,500	36,144,250

**Shakopee Public Utilities
Capital Improvement Plan
Semi-Final
Dated: October 26, 2018
Electric Detail**

Item Description	Justification	2018 Carryover	2019	2020	2021	2022	2023
Operating Fund							
System Projects							
Miscellaneous	As Necessary	-	175,000	175,000	175,000	175,000	175,000
Total Miscellaneous		-	175,000	175,000	175,000	175,000	175,000
System Material & Facilities							
Lateral Circuit Reconfiguration	System Reliability	-	85,000	25,000	25,000	25,000	25,000
Portable Trench Shoring Equipment	Trench Safety	-	-	-	-	-	-
SCADA Switches for Tie Switches	System Reliability	-	80,000	80,000	-	-	-
Meters	New Construction	-	63,000	55,000	50,000	50,000	50,000
Padmount Switches & Related	Load/Development	-	125,000	125,000	150,000	150,000	150,000
Distribution Transformers	Restock to min.	-	200,000	200,000	205,000	205,000	205,000
System Capacitors-Additional	PF Improvements	-	25,000	25,000	25,000	25,000	25,000
SCADA-Capacitor Control	Op. Efficiencies & Voltage Control	-	40,000	40,000	40,000	40,000	40,000
UG Cable Locator	Replace Old Equipment	-	-	10,000	-	-	-
CT Burden/3 Phase Meter Tester	Meter Tester	-	12,000	-	-	-	-
PMI	Voltage Moniotring	-	15,000	-	-	-	-
Substation Battery Charger	Spare Charger	-	5,500	-	-	-	-
Remote Cutter	Safety	-	4,000	-	-	-	-
Pole Wrap & Cover Up	Reliability	-	30,000	-	-	-	-
Meter Tester	Replace Old Equipment	-	-	-	-	15,000	-
Total System Material & Facilities		-	684,500	560,000	495,000	510,000	495,000
Vehicles/Equipment							
Construction-Related Equipment-New/Additional/Replacement	Tool Replacement	-	45,000	45,000	45,000	45,000	45,000
#611 Bucket Truck 4X4 Boom	Possible \$15-\$20 K trade in value	-	100,000	-	-	-	-
#636 One Ton w/Utility Box	Life Cycle Replacement	-	55,000	-	-	-	-
Tractor/Back Hoe #638	Life Cycle Replacement	-	200,000	-	-	-	-
Pole Trailer	Life Cycle Replacement - (25 yr)	-	17,000	-	-	-	-
Chipper	Life Cycle Replacement	-	55,000	-	-	-	-
Skid Loader Trailer	New Equipment	-	8,500	-	-	-	-
#642 One Ton Dump Truck	Life Cycle Replacement	-	-	50,000	-	-	-
Air Compressor	Life Cycle Replacement	-	-	30,000	-	-	-
Backyard Digger/Bucket Truck	New Equipment	-	-	175,000	-	-	-
Backyard Mini Skid Loader	New Equipment	-	-	40,000	-	-	-
Single Wire Reel Trailer	Life Cycle Replacement	-	-	11,000	-	-	-
Skid Steer Loader #624	Life Cycle Replacement	-	-	-	50,000	-	-
#616 Double Bucket	Life Cycle Replacement	-	-	-	300,000	-	-
Directional Bore Equipment	New Equip for UG Construction	-	-	-	-	250,000	-
Vac-Tron	Life Cycle Replacement	-	-	-	-	55,000	-
#637 Engineering Pick Up 4X4	Life Cycle Replacement	-	-	-	-	50,000	-
Mini Excavator	Life Cycle Replacement	-	-	-	-	60,000	-
Digger Truck	Life Cycle Replacement	-	-	-	-	-	300,000
#610 F550 4x4 Service Truck	Life Cycle Replacement	-	-	-	-	-	175,000
Forklift	Life Cycle Replacement	-	-	-	-	-	30,000
Total Vehicles/Equipment		-	480,500	351,000	395,000	460,000	550,000

Shakopee Public Utilities
Capital Improvement Plan
Semi-Final
Dated: October 26, 2018
Electric Detail

Item Description	Justification	2018 Carryover	2019	2020	2021	2022	2023
Local Area Projects							
New UG Cables & Related Cost (Net of Contribution)	Load/Development	-	350,000	350,000	400,000	400,000	450,000
Total New UG Cables & Related Cost (New of Contribution)		-	350,000	350,000	400,000	400,000	450,000
Replace UG Cable Projects							
DL-44 UG Feeder Relocation 12th Ave Recon 0.125 mile	Street Project	-	60,000	-	-	-	-
Replace UG Cable - Projects Yet To Be Determined	As Needed	-	75,000	75,000	75,000	75,000	75,000
Total Replace UG Cable Projects		-	135,000	75,000	75,000	75,000	75,000
Rebuild OH Lines							
Rebuild OH lines - as needed RP3	Change Out	-	200,000	200,000	200,000	200,000	200,000
DL-96 thru Canterbury Commons	Street Project (Shenandoah)	-	25,000	-	-	-	-
SH-08 Levee Drive 0.25 mile	Street Project	-	25,000	-	-	-	-
SH-10 Levee Drive 0.25 mile	Street Project	-	25,000	-	-	-	-
SS-31 CR 42 from CR 17 to CR 83 1.625 miles	County Project	-	-	162,500	-	-	-
BL-22 Stagecoach Road and Hanson Avenue	Street Project	-	-	75,000	-	-	-
DL-55 CR 83 from, VIBS to Hwy 169 0.75 mile	County Project	-	-	-	75,000	-	-
SS-31 CR 17 South of CR 42 to CR 82 0.75 mile	Street Project	-	-	-	-	75,000	-
SS-32 CR 15 @ Vierling Drive & Hwy 169 Ramps 0.50 mile	Roundabout Impacts	-	-	-	-	-	50,000
Total Rebuild OH Lines		-	275,000	437,500	275,000	275,000	250,000
Major System Projects							
Feeder Extension Projects							
PL-75 SBX to Stagecoach Rd 0.25 mile	Development	-	56,250	-	-	-	-
PL-73 CR18 from CR16 to Mullenhardt 0.50 mile	Load Growth	-	112,500	-	-	-	-
DL-98 New Feeder DL Sub to 4th Ave 2.00 miles	Development (Canterbury Commons)	-	450,000	-	-	-	-
DL-96 thru Canterbury Commons 0.50 mile	Load Growth	-	112,500	-	-	-	-
SS-32 CR 16 Ext. from CR15 to CR69 1.25 mile	Street Project & Development	-	112,500	117,000	60,750	-	-
SS-83 New Feeder SS Sub to CR 69&HWY169 via Xcel Easement, CR78&CR69 3.75 miles OH/UG Mix	Load Growth	-	575,000	-	-	-	-
Dean Lake Sub Exit Circuits 1.0 mile	Load Growth	-	-	234,000	-	-	-
SS-84 New Feeder SS Sub to CR 17 via Stonebrooke 0.75 mile	Load Growth	-	-	-	-	189,750	-
West Shakopee Substation Exit Circuits	Load Growth	-	-	-	-	100,000	500,000
DL-97 New Feeder DL Sub to Barenscheer Blvd 1.0 mile	Development (Canterbury Commons)	-	-	-	-	-	263,100
DL-42 Feeder Extension to Data Center 0.5 mile	Load Growth (Data Center)	-	-	-	-	-	131,550
Projects Yet to be Determined 1.0 mile	As Necessary	-	225,000	234,000	243,000	253,000	263,100
Total Feeder Extension Projects		-	1,643,750	585,000	303,750	542,750	1,157,750
Assumed Cost per mile unless noted otherwise		-	225,000	234,000	243,000	253,000	-
Convert OH to UG							
SH-08 Levee Drive 0.25 mile x 2.3 (rock)	Street Project	-	125,000	-	-	-	-
SH-10 Levee Drive 0.25 mile x 2.3 (rock)	Street Project	-	125,000	-	-	-	-
Mullenhardt Undergrounding 0.75 mile	Reliability	-	-	35,000	-	-	-
Total Convert OH to UG		-	250,000	35,000	-	-	-

**Shakopee Public Utilities
Capital Improvement Plan
Semi-Final
Dated: October 26, 2018
Electric Detail**

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Item Description	Justification	2018 Carryover	2019	2020	2021	2022	2023
Territory Acquisition							
Territory Acquisition	Purchase	-	200,000	-	-	-	-
Territory Acquisition	Consolidation	-	150,000	100,000	100,000	100,000	100,000
Total Territory Acquisition		-	350,000	100,000	100,000	100,000	100,000
Shakopee Substation							
Land Rights	Load Growth/Downtown Re-development	-	100,000	-	-	-	-
Substation to County Fiber & Fiber Equipment		-	10,000	-	-	-	-
Total Shakopee Substation		-	110,000	-	-	-	-
South Shakopee Substation							
Upgrade to RTAC C3 ilex	For SCADA	-	30,000	-	-	-	-
Substation to County Fiber & Fiber Equipment		-	10,000	-	-	-	-
Heater/AC	Add AC to control building	-	6,000	-	-	-	-
Oil Change Out on Tap Changer	Maintenance/Extend Life of Tap Changer	-	-	-	30,000	-	-
Total South Shakopee Substation		-	46,000	-	30,000	-	-
Pike Lake Substation							
SCADA C3 ilex/Schweitzer RTAC & Blue Lake	Change out C3ilex	-	50,000	-	-	-	-
Oil Change Out on Tap Changer	Maintenance/Extend Life of Tap Changer	-	25,000	-	-	-	-
Substation to County Fiber & Fiber Equipment		-	5,000	-	-	-	-
Total Pike Lake Substation		-	80,000	-	-	-	-
Dean Lake Substation							
Grating T3	Safety	-	-	-	-	-	-
Upgrade to Schweitzer Relays	For SCADA	-	-	-	-	-	-
Oil Change Out on Tap Changer	Maintenance/Extend Life of Tap Changer	-	-	30,000	-	-	-
Substation to County Fiber & Fiber Equipment		-	6,000	-	-	-	-
Dean Lake 2 Circuit Switchgear		-	-	75,000	-	-	-
Heater/AC Building 1 & 2	Add AC to control building	-	15,000	-	-	-	-
Total Dean Lake Substation		-	21,000	105,000	-	-	-
East Shakopee Substation							
Land Rights	Load Growth	-	350,000	-	-	-	-
Total East Shakopee Substation		-	350,000	-	-	-	-
West Shakopee Substation							
Land Rights	Load Growth	-	650,000	-	-	-	-
Planning/Design/Project Management	Load Growth	-	-	-	200,000	400,000	-
Construction	Load Growth	-	-	-	-	4,000,000	-
Total West Shakopee Substation		-	650,000	-	200,000	4,400,000	-

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Shakopee Public Utilities
Capital Improvement Plan
Semi-Final
Dated: October 26, 2018
Electric Detail

9	Item Description	Justification	2018 Carryover	2019	2020	2021	2022	2023
187								
188	Total Relocation Fund		-	112,500	342,750	232,500	52,000	384,000
189								
190	Total Electric		-	6,243,250	5,301,250	7,746,250	8,944,750	7,908,750

Shakopee Public Utilities
Capital Improvement Plan
Semi-Final
Dated: October 26, 2018
Water Summary

Item Description	Justification	2018 Carryover	2019	2020	2021	2022	2023
<u>Operating Fund</u>							
Miscellaneous	See Detail	250,000	587,500	367,500	405,000	281,000	280,000
System Upgrades	See Detail	-	147,400	68,500	64,000	20,000	20,000
ADVANCED METERING INFRASTRUCTURE (AMI)	See Detail	-	20,000	1,031,641	1,090,979	1,136,504	-
Vehicles/Equipment	See Detail	-	4,300	45,000	40,000	-	-
Total Operating Fund		250,000	759,200	1,512,641	1,599,979	1,437,504	300,000
<u>Reconstruction Fund</u>							
Reconstruction Projects	See Detail	-	520,000	220,000	220,000	210,000	210,000
Total Reconstruction Fund		-	520,000	220,000	220,000	210,000	210,000
<u>Trunk Fund</u>							
Trunk Water Mains - SPUC Projects	See Detail	-	25,000	25,000	25,000	25,000	25,000
Over Sizing - Non-SPUC Projects	See Detail	-	463,100	556,506	635,200	563,000	368,020
Total Trunk Fund		-	488,100	581,506	660,200	588,000	393,020
<u>Connection Fund</u>							
Wells	See Detail	-	350,000	53,040	520,000	-	-
Water Treatment	See Detail	-	-	-	51,500	583,000	5,375,800
Pump House Additions/Expansions	See Detail	-	-	-	64,400	1,272,500	-
New Tanks and Transmission Water Main	See Detail	-	250,000	2,692,800	64,900	-	-
Booster Stations	See Detail	3,671,851	-	-	-	-	-
Auxiliary Facilities	See Detail	-	-	-	-	200,000	478,000
Total Connection Fund		3,671,851	600,000	2,745,840	700,800	2,055,500	5,853,800
Total Water		3,921,851	2,367,300	5,059,987	3,180,979	4,291,004	6,756,820
Cumulative Total Water		3,921,851	6,289,151	11,349,138	14,530,117	18,821,121	25,577,941

**Shakopee Public Utilities
Capital Improvement Plan
Semi-Final
Dated: October 26, 2018
Water Detail**

Item Description	Justification	2018 Carryover	2019	2020	2021	2022	2023
<u>Operating Fund</u>							
Miscellaneous							
Water Meters	PM/Development	-	145,000	150,000	150,000	150,000	175,000
Landscaping	Line of sight screening Riverview Booster	-	13,500	13,500	-	-	-
8" Watermain Looping Boulder Pointe	Development	-	104,000	-	-	-	-
Cl2 Feed Improvements	Safety/Enhanced Accuracy	-	72,000	75,000	75,000	-	-
Chemical Feed Scales	Life Cycle Replacement	-	23,000	24,000	25,000	26,000	-
Reservoir Maintenance	Preventative Maintenance	-	50,000	50,000	50,000	50,000	50,000
Power Wash Towers	Preventative Maintenance	-	15,000	15,000	15,000	15,000	15,000
Hydrant Replacement	As Needed	-	40,000	40,000	40,000	40,000	40,000
CR16 Valve & Hydrant Adjustments	County Trail Project CP-16-XX	-	25,000	-	-	-	-
CR 83 Valve & Hydrant Adjustments	County Road Project	-	-	-	50,000	-	-
8" Watermain Looping Apgar St and 2nd Avenue		250,000	100,000	-	-	-	-
Total Miscellaneous		250,000	587,500	367,500	405,000	281,000	280,000
System Upgrades							
Reservoir Mixers	Water Quality	-	35,000	35,000	35,000	-	-
Sidewalk Repair	Safety/Maintenance	-	5,000	-	-	-	-
Cl2 Leak Detection Upgrade	Safety/Lifecycle Replacement	-	13,500	13,500	9,000	-	-
SCADA Communications Upgrade	Water System Reliability	-	57,900	-	-	-	-
Sealcoat Drives/Repair	Preventative Maintenance	-	5,000	5,000	5,000	5,000	5,000
Driveway Replacement PH 6	Preventative Maintenance	-	16,000	-	-	-	-
Miscellaneous Equipment	As Needed	-	15,000	15,000	15,000	15,000	15,000
Total System Upgrades		-	147,400	68,500	64,000	20,000	20,000
ADVANCED METERING INFRASTRUCTURE (AMI)							
Planning/Design/Project Management	Project Planning/Design	-	20,000	48,187	68,187	72,800	-
Construction/Implementation/Hardware/Software/Training	Customer Service	-	-	983,454	1,022,792	1,063,704	-
Total ADVANCED METERING INFRASTRUCTURE (AMI)		-	20,000	1,031,641	1,090,979	1,136,504	-
Vehicles/Equipment							
Portable Pressure Calibrator	Water Quality	-	4,300	-	-	-	-
Replace Truck #622	Life Cycle Replacement	-	-	-	40,000	-	-

**Shakopee Public Utilities
Capital Improvement Plan
Semi-Final
Dated: October 26, 2018
Water Detail**

Item Description	Justification	2018 Carryover	2019	2020	2021	2022	2023
New Positions Trucks	Customer Service	-	-	45,000	-	-	-
Total Vehicles/Equipment		-	4,300	45,000	40,000	-	-
Total Operating Fund		250,000	759,200	1,512,641	1,599,979	1,437,504	300,000
<u>Reconstruction Fund</u>							
Reconstruction							
Bituminous Overlay	City CIP	-	30,000	30,000	30,000	20,000	20,000
Reconstruction	City Street Recon	-	450,000	150,000	150,000	150,000	150,000
Correct Deficient Services	As Needed	-	40,000	40,000	40,000	40,000	40,000
Total Reconstruction		-	520,000	220,000	220,000	210,000	210,000
Total Reconstruction Fund		-	520,000	220,000	220,000	210,000	210,000
<u>Trunk Fund</u>							
Trunk Water Mains - SPUC Projects (Completed by SPUC)							
Projects to be determined		-	25,000	25,000	25,000	25,000	25,000
Total Trunk Water Mains - SPUC Projects		-	25,000	25,000	25,000	25,000	25,000
Over Sizing - Non-SPUC Projects (Completed by Others)							
16" WM East from Monarch Estates parallel to 17th Ave to CR 83 0.875 mile NES	Development	-	152,400	79,250	164,800	171,400	-
16" WM Windermere South from Booster Station to 2-HES Tank Site	Development	-	60,000	62,400	32,500	-	-
16" WM Krystal Addition to CR 79 (800 ft) NES	Development	-	70,000	-	-	-	-
12" WM South from Hwy 169 to 17th Ave 0.25 mile (Hauer) NES	Development	-	48,700	-	-	-	-
12" WM West from CR 17 North of Wood Duck Trail (1200 ft) 2-HES	Development	-	40,000	-	-	-	-
12" WM C.R. 16 from C.R. 15 west to C.R. 69 - (DR Horton) 0.25 mile/segment 2-HES	Development/City Project/Scott County Proj	-	-	52,000	55,000	57,200	-
12" WM West of Windermere 0.75 mile 1-HES	Development	-	-	208,000	-	-	-
12" WM on Stagecoach Rd from Eagle Creek Preserve to Hansen Ave 0.5 mile NES	Development	-	-	104,000	-	-	-
12" WM Vierling Drive West from CR 69 0.25 mile NES	Development	-	-	50,856	-	-	-
12" WM Parallel to CR 69 South from Vierling Drive 0.75 mile NES	Development	-	-	-	52,900	110,000	-
12" WM Thrush Street from CR 83 to 0.25 mile West 1- HES	Development	-	-	-	55,000	-	-
12" WM CR 83 from Thrush Street to 0.25 mile north 1-HES	Development	-	-	-	55,000	-	-

**Shakopee Public Utilities
Capital Improvement Plan
Semi-Final
Dated: October 26, 2018
Water Detail**

Item Description	Justification	2018 Carryover	2019	2020	2021	2022	2023
12" WM West of Tank Site thru area B to CR69 0.25 mile	Development	-	-	-	110,000	-	-
12"WM West of CR 69 thru area B 0.50 mile 2-HES	Development	-	-	-	110,000	-	-
12" WM CR 69 South of HWY 169 0.50 mile 1-HES to 2-HES	Development	-	-	-	-	110,000	-
12" WM West of CR 69 thru area B 0.50 mile 1-HES	Development	-	-	-	-	114,400	-
12" WM Parallel to CR 69 South from CR 16 0.25 mile 2-HES	Development	-	-	-	-	-	59,500
12" WM Horizon Drive across CR 18 to Foothill Road 2-HES (1.0 mile) 2 HES to NES	Development	-	-	-	-	-	225,000
8" WM on Muhlenhardt Rd 0.50 mile 1-HES to 2-HES	Development	-	-	-	-	-	83,520
Projects to be determined		-	92,000	-	-	-	-
Total Over Sizing - Non-SPUC Projects		-	463,100	556,506	635,200	563,000	368,020
Total Trunk Fund		-	488,100	581,506	660,200	588,000	393,020
Connection Fund							
Wells							
2-HES Well/Tank Site @ South of Windermere	Development	-	350,000	-	-	-	-
1 or 2-HES Jordan Well @ South of Windermere or @Windermere Booster	Development	-	-	53,040	520,000	-	-
Total Wells		-	350,000	53,040	520,000	-	-
Water Treatment							
NES Jordan Well #22 Submersible (Pump House No. 3 modifications)	Radium Remediation	-	-	-	51,500	518,000	-
Water Treatment Plant	Water Quality	-	-	-	-	65,000	5,375,800
Total Water Treatment		-	-	-	51,500	583,000	5,375,800
Note: NES Well #22 and The Water Treatment Plant are not currently needed, they are put into the budget as placeholders as contingencies in the event they become necessary.							
Pump House Additions/Expansions							
2-HES Pump House @ South of Windermere	Development	-	-	-	64,400	1,272,500	-
Total Pump House Additions/Expansions		-	-	-	64,400	1,272,500	-
New Tanks and Transmission Water Main							

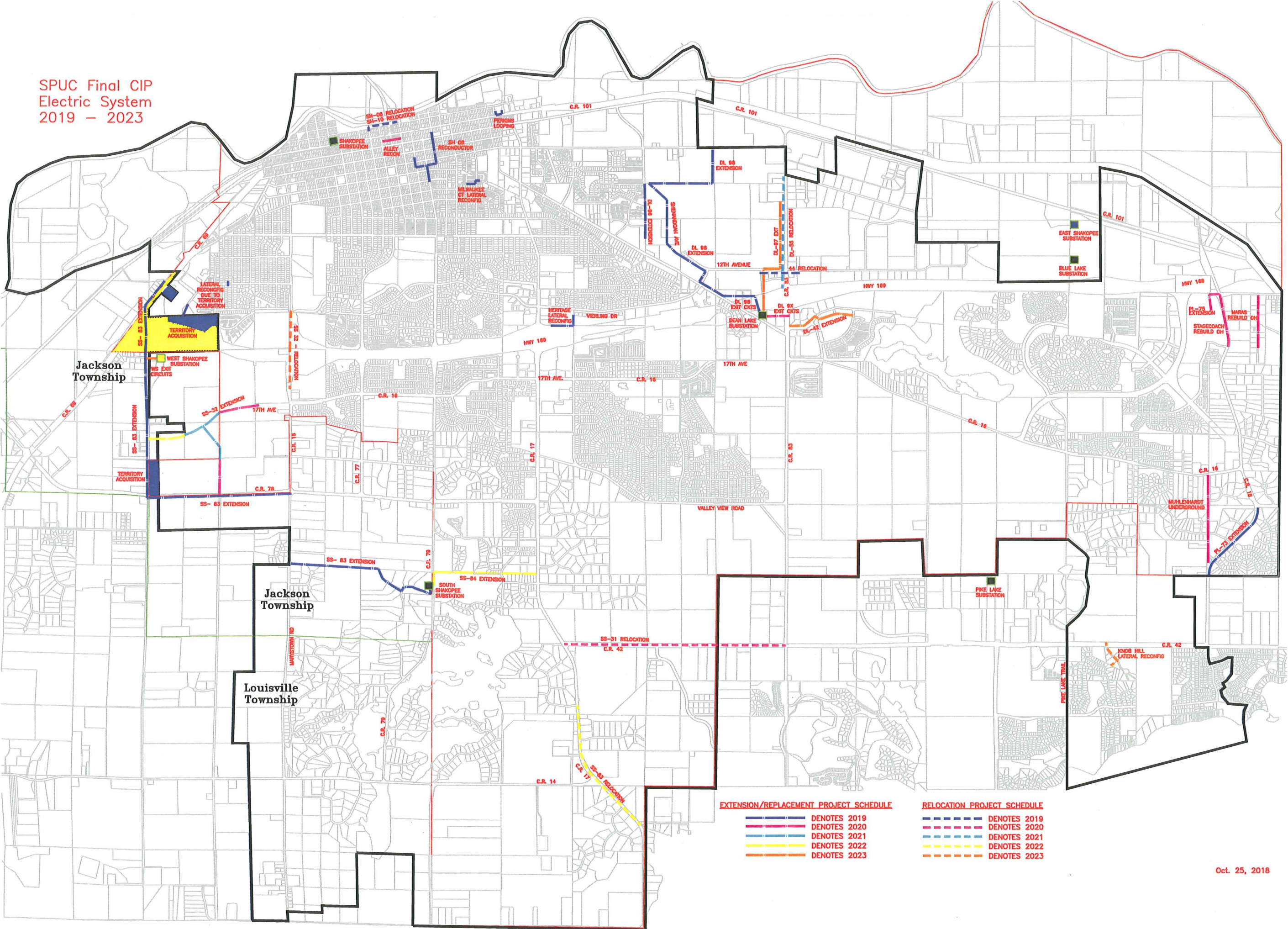
**Shakopee Public Utilities
Capital Improvement Plan
Semi-Final
Dated: October 26, 2018
Water Detail**

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Item Description	Justification	2018 Carryover	2019	2020	2021	2022	2023
2-HES District Storage (0.5 MG, Elevated Tank) @ South of Windermere	Development	-	130,000	2,568,000	-	-	-
Transmission Watermain Equivalent (16"vs. 12") Windermere Booster Station to 2-HES Tank	Development	-	120,000	124,800	64,900		
Total New Tanks and Transmission Water Main		-	250,000	2,692,800	64,900	-	-
Booster Stations							
Booster Station @ Windermere 1-HES to 2-HES	Development	3,671,851	-	-	-	-	-
Total Booster Stations		3,671,851	-	-	-	-	-
Auxiliary Facilities	Development						
Inline Booster Station Site @ Foothill Road and Horizon Drive	Development	-	-	-	-	150,000	-
Inline Booster Station @ Foothill and Horizon NES to 2 HES	Development	-	-	-	-	50,000	400,000
Pressure Reducing Valve - 2-HES to 1-HES @ Horizon Drive and trail bend	Development	-	-	-	-	-	26,000
Pressure Reducing Valve - 2-HES to 1-HES @ Muhlenhardt Rd	Development	-	-	-	-	-	26,000
Pressure Reducing Valve - 2-HES to 1-HES @ CR 69	Development	-	-	-	-	-	26,000
Total Auxiliary Facilities		-	-	-	-	200,000	478,000
Total Connection Fund		3,671,851	600,000	2,745,840	700,800	2,055,500	5,853,800
Total Water		3,921,851	2,367,300	5,059,987	3,180,979	4,291,004	6,756,820

SPUC Final CIP
Electric System
2019 - 2023



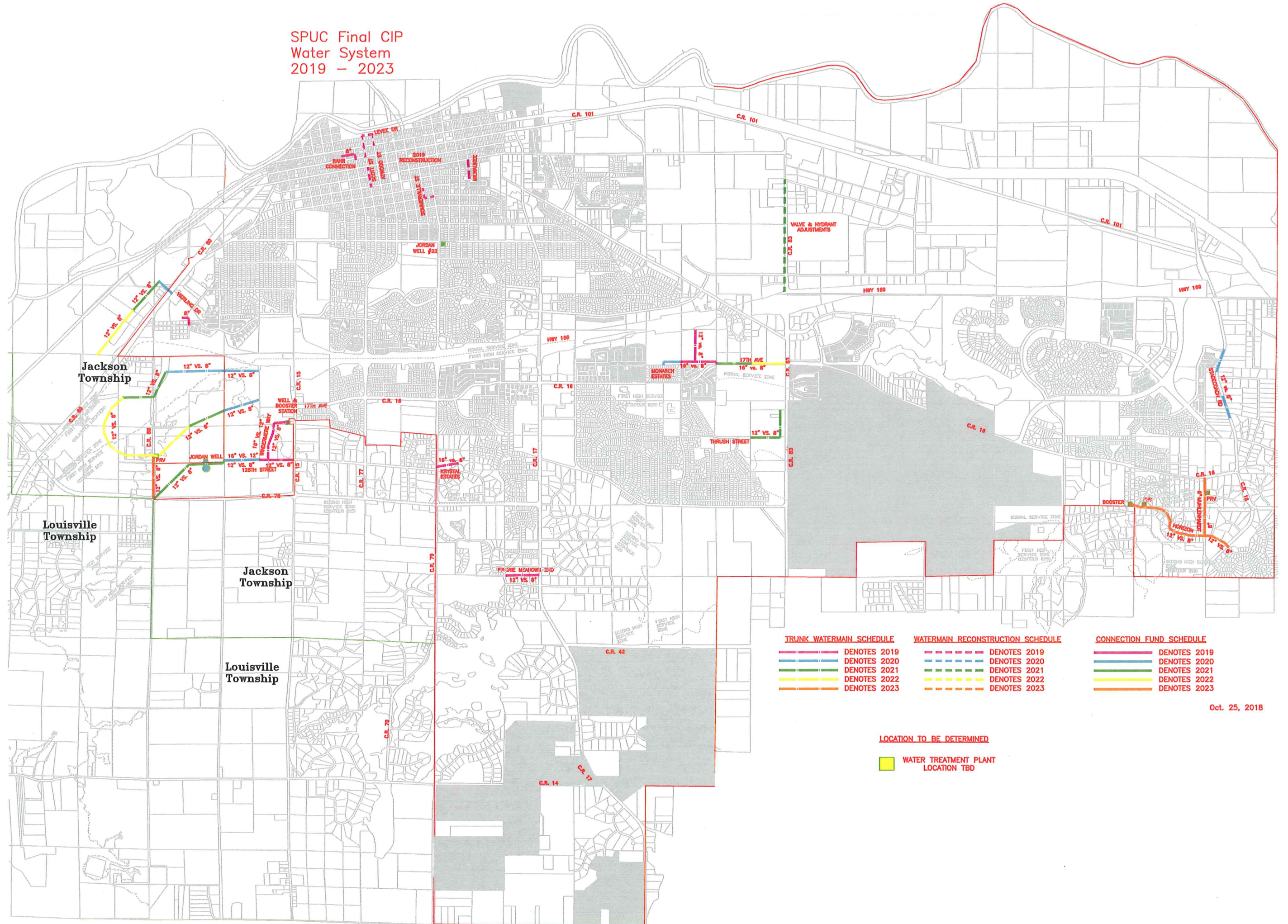
EXTENSION/REPLACEMENT PROJECT SCHEDULE

- DENOTES 2019
- DENOTES 2020
- DENOTES 2021
- DENOTES 2022
- DENOTES 2023

RELOCATION PROJECT SCHEDULE

- DENOTES 2019
- DENOTES 2020
- DENOTES 2021
- DENOTES 2022
- DENOTES 2023

SPUC Final CIP
Water System
2019 – 2023



TRUNK WATERMAIN SCHEDULE
 — DENOTES 2019
 — DENOTES 2020
 — DENOTES 2021
 — DENOTES 2022
 — DENOTES 2023

WATERMAIN RECONSTRUCTION SCHEDULE
 — DENOTES 2019
 — DENOTES 2020
 — DENOTES 2021
 — DENOTES 2022
 — DENOTES 2023

CONNECTION FUND SCHEDULE
 — DENOTES 2019
 — DENOTES 2020
 — DENOTES 2021
 — DENOTES 2022
 — DENOTES 2023

Oct. 25, 2018

LOCATION TO BE DETERMINED

WATER TREATMENT PLANT
LOCATION TBD