2017 thru 2021 **DRAFT Recommended Projects** Department Public Works - Stormwater City of Lawrence, Kansas Contact PW Director Type Equipment PW17S1CIP Project # Useful Life 10years Project Name Storm Sewer Video Inspection Unit Category Storm Sewer/Drainage partment Priority 2 Very Important 3 Important Priority Unfunded Status Active **Total Project Cost:** \$150,000 Description Justification **Expenditures** 2019 2020 2017 2018 2021 Total Equip/Vehicles/Furnishings 150,000 150,000 150,000 150,000 Total **Funding Sources** 2017 2018 2019 2020 2021 Total Stormwater Fund 150,000 150,000 150,000 150,000 Total **Budget Impact/Other**

2017 thru 2021

DRAFT Recommended Projects	2017 Intra 2021 Depar	tment Public Works	s - Stormwater
City of Lawrence, Kansas	С	ontact PW Director	
Project # PW17S2CIP		Type Improvement	
		l Life 50 years	
Project Name 13th Brook Drainage Improvement Impr	ovements Cat	egory Storm Sewer/	Drainage
partment Priority 3 Important	Pr	iority 4 Less Import	ant
Unfunded	:	Status Active	
Description	Total Project	Cost: \$250,000	
Justification			
Work to improve drainage in drainage basin, eliminate street and pro-	perty flooding		

Expenditures		2017	2018	2019	2020	2021	Total
Construction/Maintena	nce	250,000					250,000
	Total	250,000					250,000
Funding Sources		2017	2018	2019	2020	2021	Total
Stormwater Fund		250,000					250,000
	Total	250,000					250,000

Budget Impact/Other

Will decrease annual maintenance cost caused by several high water events each year.

2017 thru 2021

Department Public Works - Stormwater

Contact

City of	Lawrence,	Kansas
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Project # P	W17S3CIP	Туре	Maintenance
		Useful Life	30 years
Project Name S	torm Water Culvert Lining	Category	Unassigned
partment Priority	2 Very Important	Priority	3 Important
Unfunded		Status	Active
Description		Total Project Cost:	\$1,250,000

Rehabilitate failing storm water culverts by rehabilitation without doing dig and replace. Projects would be completed by in house forces and contract maintenance projects

Justification

With over 150 miles of underground storm water drainage pipes and culverts with many miles under arterials and collector routes this provides an option to be proactive in the maintenance of the system and provide for a method to rehabilitate without long term street closures and traffic disruptions. Currently we are only reactive after a failure.

Expenditures		2017	2018	2019	2020	2021	Total
Construction/Maintena	nce	250,000	250,000	250,000	250,000	250,000	1,250,000
	Total	250,000	250,000	250,000	250,000	250,000	1,250,000
Funding Sources		2017	2018	2019	2020	2021	Total
Funding Sources Stormwater Fund		2017 250,000	2018 250,000	2019 250,000	2020 250,000	2021 250,000	Total 1,250,000

Budget Impact/Other

In place rehabilitation and repair can provide a savings of 20% over the cost of dig and replace. By being proactive we can eliminate we can reduce the need for more costly replacement.

2017 thru 2021 **DRAFT Recommended Projects** Department Public Works - Stormwater City of Lawrence, Kansas Contact PW Director Type Improvement PW18S1CIP Project # Useful Life 50 years Project Name Naismith Drainage Channel Category Storm Sewer/Drainage partment Priority 2 Very Important 1 Critical Priority Unfunded Status Active Total Project Cost: \$2,500,000 Description Repair or replace concrete drainage channel, inflow drainage pipes, and CMP portion of structure under 23rd St.

Justification

Drainage channel is deteriorated and undermined causing water to flow under channel creating voids under channel and structure under 23rd St. Inflow pipes along Naismith are experiencing section loss allowing undermining of the channel and possibly Naismith Dr.

Expenditures		2017	2018	2019	2020	2021	Total
Construction/Maintenance			2,500,000				2,500,000
	Total		2,500,000				2,500,000
Funding Sources		2017	2018	2019	2020	2021	Total
Stormwater Fund			2,500,000				2,500,000

DRAFT Recommended	Projects	2017 thru 2021	Department	Public Works - Stormwater
City of Lawrence, Kansa	as		Contact	PW Director
Project # PW18S2CIP			Туре	Improvement
Project Name 23rd & Ousdahl			Useful Life	50 years
2310 & Ousuani			Category	Storm Sewer/Drainage
oartment Priority 1 Critical			Priority	2 Very Important
Unfunded			Status	Active
Description	7	Tota	l Project Cost:	\$2,400,000
Justification				
23rd Street experiences frequent flood	ling and during flood events is p	public safety concern.		

Expenditures		2017	2018	2019	2020	2021	Total
Construction/Maintenance			2,400,000				2,400,000
	Total		2,400,000				2,400,000
Funding Sources		2017	2018	2019	2020	2021	Total
Stormwater Fund			2,400,000				2,400,000
	Total		2,400,000				2,400,000

2017 thru 2021

DRAFT	Recommended Proje	cts		2017 thru	2021	Department	Public Works - Stormwater
City of l	Lawrence, Kansas					Contact	PW Director
Project #	PW19S1CIP					Туре	Improvement
-		-				Useful Life	30 years
Project Nam	^e 17th and Alabama Drai	nage Improv	vement			Category	Storm Sewer/Drainage
oartment Prio	rity 2 Very Important					Priority	1 Critical
Unfun	ded					Status	Active
Descriptio	n				Tota	l Project Cost:	\$2,500,000
Consolidate	drainage eliminate street flooding						
1							
Justificatio	n						
In moderate	rain events creates street and prop	erty flooding					
	Expenditures	2017	2018	2019	2020	2021	Total
	Planning/Design			100,000			100,000
	Construction/Maintenance			2,400,000			2,400,000
	Total			2,500,000			2,500,000
	Funding Sources	2017	2018	2019	2020	2021	Total
	Stormwater Fund			2,500,000			2,500,000

2,500,000

Budget Impact/Other

Total _

2,500,000

2017 thru 2021

DRAFT Recommended Projects	2017 1111 2021	Department	Public Works - Stormwater
City of Lawrence, Kansas		Contact	PW Director
Project # PW20S1CIP		Туре	Maintenance
		Useful Life	30 years
Project Name Concrete Channel W of Arrowhead Prin	ceton to Peter	Category	Storm Sewer/Drainage
partment Priority 3 Important		Priority	3 Important
Unfunded		Status	Active
Description	Total	Project Cost:	\$1,000,000
Concrete Channel is failing slopes and base of channel are undermin water issues.	ed with voids, concrete panels are be	oken and dislo	odged creating standing

Justification

remove old channel and install permeable channel to control heavy water flows and encourage vegetation growth in stream way.

Expenditures	2017	2018	2019	2020	2021	Total
Construction/Maintenance				1,000,000		1,000,000
Тс	otal			1,000,000		1,000,000
Funding Sources	2017	2018	2019	2020	2021	Total
Stormwater Fund				1,000,000		1,000,000
Тс	otal			1,000,000		1,000,000

2017 thru 2021

DRAFT Recommended Projects	2017 thru 2021	Department	Public Works - Stormwater	
City of Lawrence, Kansas		Contact	PW Director	
Project # PW21S1CIP		Туре	Improvement	
·		Useful Life	30 years	
Project Name 19th St Maple Ln to Brook		Category	Storm Sewer/Drainage	
partment Priority 2 Very Important		Priority	2 Very Important	
Unfunded		Status	Active	
Description	Total	Project Cost:	\$2,000,000	
Justification				
Included in the Storm water master plan as project number 34.				
Expenditures 2017 201	8 2019 2020	2021	Total	
Construction/Maintenance		2,000,000	2,000,000	
Total		2,000,000	2,000,000	

	Total					2,000,000	2,000,000
Funding Sources		2017	2018	2019	2020	2021	Total
Stormwater Fund						2,000,000	2,000,000
	Total					2,000,000	2,000,000