

## 20 YEAR CAPITAL IMPROVEMENTS PLAN WITH FULL PUMP STATION REPLACEMENT

May 2, 2017

Project	Frequency	Last Comp.	Projected Date	Est. Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037		
					Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget
<b>Pump Station and Main Outfall Channel Capital Improvement Projects</b>																											
Outfall Inspection (RCB, Pump Discharge, Interceptors) Video	Annually	FY2014	FY2018			\$10,000	\$10,200	\$10,404	\$10,612	\$10,824	\$11,041	\$11,262	\$11,487		\$11,717	\$11,951	\$12,190	\$12,434	\$12,682	\$12,936	\$13,195	\$13,459	\$13,728	\$14,002	\$14,282		
Verify District Benchmarks and Survey Main Outfall Channel	2 Years	FY2016	FY2018			\$3,000		\$3,120		\$3,245		\$3,375		\$3,510		\$3,650		\$3,796		\$3,948		\$4,106		\$4,270			
Outfall Channel Regarding	3 Years	FY2017	FY2020		\$18,650			\$19,769			\$20,955			\$22,212			\$23,545			\$24,958			\$26,455				
Regrade Channel Backslope Swales	3 Years	FY2012	FY2018			\$20,000			\$21,200			\$22,472			\$23,820			\$25,250			\$26,765			\$28,370			
Pump Station Stream Gages	5 Years	FY2016	FY2021						\$1,200				\$1,320					\$1,452						\$1,597			
Replace Kubota UTV	8 Years ±	FY2014	FY2021						\$20,000								\$23,200							\$26,912			
Main Outfall RCB Joint Repair	10 Years ±	FY2017	FY2035		\$37,725																		\$51,306				
Avondale Culverts Joint Repair	10 Years ±	FY1988	FY2018			\$60,000																		\$40,000			
Recoat Flap and Slide Gates	10 Years ±	FY2016	FY2036																	\$24,000					\$30,000		
Irrigation Well Rework	10 Years ±	FY2013	FY2023							\$20,000															\$30,000		
Replace Cameras and System	10 Years ±	FY2014	FY2026											\$25,000											\$30,000		
Float System Replacement	15 Years ±	FY2016	FY2026											\$25,000											\$23,060		
Pump Station Fence Replacement	15 Years ±	Various	FY2026											\$25,000													
Concrete Driveway (From Avondale to Wooden Gate)	20 Years ±	FY2017	FY2037		\$12,900																				\$23,060		
Pump Station Internal Access Replacement <sup>(1)</sup>	20 Years ±	Various	FY2026											\$100,000													
Generator Replacement (Natural Gas) <sup>(1)</sup>	20-30 Years ±	FY2010	FY2026					\$275,000																			
Replace Interceptor Structures	30 Years ±	FY1988	FY2018			\$40,000																					
Replace Stormwater Pump Station <sup>(1)</sup>	30 Years ±	FY1988	FY2026											\$1,540,000													
Replace Slide and Flap Gates <sup>(1)</sup>	50 Years ±	FY1988	FY2026											\$500,000													
Replace RCB Outfall and Pump Discharges <sup>(1)</sup>	50 Years ±	FY1988	FY2026											\$900,000													
<b>Optional Projects to Consider</b>																											
Flap Gate Hoist System	Single			\$60,000																							
Pump Station Weather Station	Single			\$6,000																							
Intake Opt. 1 - Pump Station Intake Dry Condition	Single			\$40,000																							
Intake Opt. 2 - Pump Station Intake Sump Pump	Single			\$80,000																							
Automation Opt. 1 - Pump Station Autodailer	Single			\$6,000																							
Automation Opt. 2 - SCADA System w/ Ultrasonic Sensor	Single			\$30,000																							
Ultrasonic Sensor (Gauge)	Single			\$10,000																							
Slide Gate Electric Actuators	Single			\$80,000																							
Pump Station Fence Installation around Intake	Single			\$15,000																							
Floatable Collection/Safety Screen (Alcorn Lake)	Single		FY2018			\$20,000																					
<b>Total Pump Station and Main Outfall Channel Capital Improvement Projects</b>					\$69,275	\$153,000	\$10,200	\$308,293	\$53,012	\$14,069	\$51,996	\$37,108	\$11,487	\$3,132,042	\$35,537	\$15,601	\$58,935	\$41,479	\$14,134	\$41,842	\$63,959	\$17,564	\$91,489	\$118,240	\$64,254		
<b>Levee System and Internal Drainage Capital Improvement Projects</b>																											
Levee Top Elevation Verification	5 year	FY2008	FY2018			\$5,000					\$5,500					\$6,050							\$6,655				
ROW Gate and Bollard Replacements	10 Years	FY2015	FY2025										\$30,000											\$36,000			
ROW Fence Replacements	10 Years	FY2015	FY2025										\$50,000											\$60,000			
Irrigation System Replacement	10 Years ±	FY2013	FY2023								\$40,000										\$48,000						
Replace Storm Sewer Gate and Vault on Commonwealth	15 Years ±		FY2018			\$40,000																					
Slope Paving Replacements	20 Years ±	Various	FY2020				\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000		\$100,000	\$100,000	\$100,000										
Commonwealth Blvd. Pond Silt Removal	20 Years ±						\$90,000	\$80,000	\$120,000	\$109,000	\$30,000																
<b>Optional Projects to Consider</b>																											
All-Weather Access (Commonwealth to University)	Single			\$400,000																							
All-Weather Access (East of Ring Portion to Commonwealth)	Single			\$900,000																							
Alternative All-Weather Access from Public ROWs	Single			\$50,000																							
Levee Improvement (Raising Primary System 2')	Single	FY2020	FY2018			\$600,000																					
<b>Total Levee System Capital Improvement Projects</b>					\$0	\$645,000	\$190,000	\$180,000	\$220,000	\$209,000	\$175,500	\$100,000	\$180,000	\$0	\$100,000	\$106,050	\$100,000	\$0	\$0	\$0	\$54,655	\$0	\$96,000	\$0	\$0		
<b>Other Drainage Facilities Capital Improvement Projects</b>																											
Public Outreach and Involvement	Annually	N/A	FY2017		\$39,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	
District Facility Improvements	Annually	N/A				\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	
<b>Total Other Drainage Facilities Capital Improvement Projects</b>					\$39,000	\$60,000	\$60,000	\$60,000	\$60,000	\$100,000	\$60,000	\$60,000	\$60,000	\$10,000	\$100,000	\$60,000	\$60,000	\$60,000	\$60,000	\$100,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
<b>CIP Management</b>					\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000
<b>Total Capital Improvements Budget</b>					\$111,275	\$861,000	\$263,200	\$551,293	\$336,012	\$326,069	\$290,496	\$200,108	\$254,487	\$3,145,042	\$238,537	\$184,651	\$221,935	\$104,479	\$77,134	\$144,842	\$181,614	\$80,564	\$250,489	\$181,240	\$127,254		

Notes:  
<sup>(1)</sup> This CIP is based on a complete replacement of the District's Storm Water Pump Station and Outfalls. The cost is a conservative estimate until the District authorizes a preliminary design concept or final design concept by the Engineer which would include a detailed estimate based on construction prices at the time authorization.

