## HBPW PROPOSED FIVE YEAR PLAN OF CAPITAL IMPROVEMENTS ADMINISTRATION DEPARTMENT



PROJECT #	PROJECT DESCRIPTION	20	24 - 2025	20	25 - 2026	20	26 - 2027	20	27 - 2028	20	28 - 2029
A-1	Security Upgrades (Physical & Cyber): Install security cameras at various HBPW locations/facilities to be monitored										
	24 hours per day.			\$	7,500						
A-2	Business Park Improvements: This project is to continue to improve the City/BPW-owned Business Park just east of Shinn Lane to make the site more marketable for future businesses. The site has been certified with the State of Missouri and future improvements could be for stormwater management, new roadways and entrances, and possible other items. Development expenditures could be larger if tenant interest in the park increases.		150,000		150,000	\$	150,000	\$	150,000	\$	150,000
A-3	<b>Facility Improvements:</b> An improved physical layout for our customer service areas, customer parking, administrative offices, warehouse and service truck areas would make the HBPW customer experience safer and more pleasant as well as allow for improved safety, communications and workflow for staff.		300,000	\$	300,000	\$	300,000	\$	300,000	\$	300,000
A-4	<b>SCADA Radio Replacement:</b> The existing radio hardware will no longer be supported and will need to be replaced. The SCADA radio system allows us to maintain communications with equipment in the field at HBPW facilities. Will start with propagation study for evaluation followed by the upgrade.	\$	30,000	\$	200,000						
A-5	<b>Automatic Breaker Switch for Warehouse:</b> A "make, not break" switch to allow the power coming into the warehouse to instantaneously load and sync with the tap inside the warehouse.	\$	25,000		·						
SUBTOTAL	ADMINISTRATIVE PROJECTS	\$	505,000	\$	657,500	\$	450,000	\$	450,000	\$	450,000
PROPOSED	FINANCING		, -				, -				
	Y CAPITAL CONTRIBUTIONS/ GRANT FUNDING										
FROM BPW	FUNDS	\$	505,000	\$	657,500	\$	450,000	\$	450,000	\$	450,000

# HBPW PROPOSED FIVE YEAR PLAN OF CAPITAL IMPROVEMENTS IT DEPARTMENT



PROJECT #	PROJECT DESCRIPTION	20	24 - 2025	202	25 - 2026	202	26 - 2027	202	27 - 2028	20	28 - 2029
	Computer Hardware/Software Upgrades: Computer upgrades, credit card swipers, and other various equipment replacements. This cost does not include existing software and hardware maintenance costs, which are included in the Operating budget.		66,000	\$	45,000	\$	45,000	<b>\$</b>	45,000	\$	45,000
IT-2	<b>Vulnerability Assessment:</b> Contract with a third party to take a look at our current cybersecurity measures and look for any vulnerabilities we may have.		30,000								
IT-3	<b>Network Switch Upgrades:</b> Upgrades needed due to age of current hardware.	\$	55,000							\$	60,000
SUBTOTAL A	ADMINISTRATIVE PROJECTS	\$	151,000	\$	45,000	\$	45,000	\$	45,000	\$	105,000
PROPOSED	FINANCING										
THIRD PART	Y CAPITAL CONTRIBUTIONS/ GRANT FUNDING				·						
FROM BPW	FUNDS	\$	151,000	\$	45,000	\$	45,000	\$	45,000	\$	105,000

## HBPW PROPOSED FIVE YEAR PLAN OF CAPITAL IMPROVEMENTS ELECTRIC DEPARTMENT



PROJECT #	PROJECT DESCRIPTION	20	24 - 2025	20	25 - 2026	20	26 - 2027	20	27 - 2028	20	28 - 2029
E-1	Oakwood to Southside Tie Upgrades (34.5kV Line): Install a new 34.5kV line from Oakwood Substation to Southside Substation. This would close the 34.5kV loop, and add flexibility and reliability to the electrical system. This includes relocating the 13.8kV line (circuits 22 & 24) to further enhance resiliency.		2,000,000								
E-2	Interconnect Agreement: This will be an additional tie at the Finn substation to provide emergency backup power. This is expected to be reimbursed 100% unless we decide to do a bilateral connection.									\$	329,800
E-3	<b>Demolition of 73 34.5kV Line:</b> The 73 line is functionally obsolete and this will save on the wholesale distribution charges that Ameren presently assesses.		96,000								
E-4	<b>34.5kV Loop Upgrades:</b> Reconductor (increase wire size) the existing 34.5kV line from Southside Sub to Indian Mounds Sub from 477 to 795. This estimate includes new wire, poles, etc. This project would make the entire 34.5kV loop 795 wire and add increased flexibility and more convenient maintenance to the system.							\$	500,000	\$	1,500,000
E-5	<b>Street Light Upgrades - Thoroughfares:</b> This yearly expense would support the street light improvement plan for thoroughfares.	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000
E-6	<b>Street Light Upgrades - Residential Neighborhoods:</b> This yearly expense would support street light improvements in residential neighborhoods.		50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000
E-7	<b>Fleet Management:</b> Continuous upgrades of the company fleet. The 2024-2025 purchase will likely be for a new truck 31 (dump truck) and the 2025-2026 purchase for a new service truck. We plan to eventually begin replacing one bucket truck a year.		150,000	\$	350,000	\$	250,000	\$	250,000	\$	250,000

## HBPW PROPOSED FIVE YEAR PLAN OF CAPITAL IMPROVEMENTS ELECTRIC DEPARTMENT



PROJECT #	PROJECT DESCRIPTION	20	24 - 2025	20	25 - 2026	202	26 - 2027	202	7 - 2028	202	28 - 2029
E-8	<b>Utility Relocations/Community Development:</b> The City and State have projects that come up throughout the year in which utilities need to be relocated. The Board approved a policy to budget a certain amount yearly to fund these relocations. Also, the BPW periodically assists City departments (such as Parks and Recreation) with various lighting projects.		40,000	\$	40,000	\$	40,000	\$	40,000	\$	40,000
E-9	IM Substation Rebuild: The Indian Mounds substation was originally constructed in the 1960's and 10 years ago the breakers and switchgear were rebuilt. The transformer has been ordered. The remaining parts of the substation are original and nearing the end of their life expectancy. This project would be to update those components. Engineering and land acquisition are underway with equipment rehabilitation and construction to follow.	\$	2,476,000				·		·		·
E-10	West Substation 2nd Transformer: It is anticipated that future electric load growth will take place in the Northwest area of the City. An alternative distribution transformer in this area will improve reliability and better serve these customers. We plan to have the old Indian Mounds transformer rebuilt and moved for this purpose. This will require a new concrete pad and a new control enclosure.			\$	600,000	\$	550,000				
E-11	<b>Overhead to Underground Conversion:</b> Converting existing overhead power lines to underground to provide greater reliability. Many of these lines are approaching the end of their useful life.		100,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000
E-12	<b>Substation Security Cameras:</b> Install security cameras at each of the six substations to be monitored 24 hours a day.	\$	22,500	\$	22,500				·		

## HBPW PROPOSED FIVE YEAR PLAN OF CAPITAL IMPROVEMENTS ELECTRIC DEPARTMENT



PROJECT #	PROJECT DESCRIPTION	20	24 - 2025	2	025 - 2026	2	026 - 2027	20	27 - 2028	2	028 - 2029
E-13	Spill Prevention, Control, & Countermeasure (SPCC) Plan Update: This rule is required by the EPA to prevent oil spills and to clean them up promptly once they occur. A plan is required and must be certified by an engineer. Our plan was last certified in 2015 and we have made changes at the Oakwood substation and will be making changes at the Indian Mounds substation that need to be incorporated into the plan.		75,000								
E-14	<b>Systemwide Load Study:</b> Third-party evaluation of our system load and overall health of our electric distribution assets. This study was last performed in 2015 by BHMG.			\$	250,000						
SUBTOTAL	L ELECTRIC PROJECTS	\$	5,059,500	\$	1,462,500	\$	1,040,000	\$	990,000	\$	2,319,800
PROPOSED	FINANCING	-	2,800,000	\$	-	\$	-	\$	500,000	\$	1,500,000
THIRD PART	Y CAPITAL CONTRIBUTIONS/ GRANT FUNDING		_		_				_	\$	329,800
FROM BPW	FUNDS	\$	2,259,500	\$	1,462,500	\$	1,040,000	\$	490,000	\$	490,000

### HBPW PROPOSED FIVE YEAR PLAN OF CAPITAL IMPROVEMENTS WATER DEPARTMENT



PROJECT #	PROJECT DESCRIPTION	202	24 - 2025	20	25 - 2026	20	26 - 2027	20	27 - 2028	20	28 - 2029
	DISTRIBUTION SYSTEM UPGRADES										
	Infrastructure Renewal/Replacement: Ongoing yearly										
	expense to replace deteriorated and/or substandard water										
W-1	lines. Prioritization will be per the Water System Study &										
	Owner Supervised Program, starting with the priority #2							١.			
	items that are affordable.	\$	250,000	\$	250,000	\$	250,000	\$	250,000	\$	250,000
	Lead Service Line Replacement: Replace non-										
W-2	conforming service lines. The first step will be an inventory							_	400.000		
	of the system.							\$	100,000		
	Water Line/Hydraulic Upgrades for Industrial Area:										
	This project would bring more water for usage and fire										
W-3	protection (ISO ratings) to the Industrial Loop located near										
	Warren Barrett Drive and Hwy 61, and it was a										
	recommendation of the Water System Study. Work will commence as the need arises.									\$	950,000
	Utility Relocations/Community Development: The City									Ψ	330,000
	and State have projects that come up throughout the year										
W-4	in which utilities need to be relocated. The Board										
" -	approved a policy to budget a certain amount yearly to fund										
	these relocations.	\$	20,000	\$	20,000	\$	20,000	\$	20,000	\$	20,000
	West Side Booster Station: This was a priority #2	<u> </u>				*		_			
	recommendation of the Water System Study. It is likely										
	that land will have to be purchased in the area near West										
14/ 5	Ely and Head Lane in order to construct the booster										
W-5	station. The water lines were installed as part of the										
	current 2015 SRF projects. Work will commence as land										
	becomes available and needs for the booster station arise.										
										\$	750,000
W-6	Valve Exercising Machine: This machine is becoming					_					
	very old and has been rebuilt several times.					\$	100,000				
W-7	Water System Modeling: Create an electronic model of										
	the entire system to monitor flows, pressures, etc.			\$	75,000						
	VEHICLES										

### HBPW PROPOSED FIVE YEAR PLAN OF CAPITAL IMPROVEMENTS WATER DEPARTMENT



PROJECT#	PROJECT DESCRIPTION	20	24 - 2025	202	25 - 2026	20	26 - 2027	202	7 - 2028	202	8 - 2029
W-8	Fleet Management: Continuous upgrades of the company fleet. Replace approximately one water department utility			_	40.000			•	40.000		
	vehicle every other year.			\$	40,000			\$	40,000		
W-9	Infrastructure Renewal/Replacement: These items vary year to year, but include replacement and/or upgrading of the following equipment: repainting of the lime silo, pump rebuilds, treatment basin concrete repairs, tuck pointing of Filter and Chemical buildings, chemical feeders, meters, monitoring equipment, laboratory equipment, mixers, motors, etc.	\$	50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000
W-10	<b>Primary Clarifier Scraper:</b> To replace the current 1993 steel structure, which is at the end of its useful life. The clarifier is used to remove solids from the treatment process.	\$	300,000								
W-11	Paddle Wheel Gearbox: In conjunction with the replacement of the primary clarifier scraper, the paddle wheel gearbox and bearings would also be replaced as they are also at the end of their useful life.	\$	50,000								
W-12	<b>Pre-Sedimentation Basin:</b> Cracks in the walls were sealed in 2017. The next step is to repair the buckling floor of the basin. This project includes adding baffles to improve the treatment effectiveness of the structure.	\$	100,000								
W-13	<b>Demolish Old Clearwell:</b> The structure is unused and obsolete and removing it would allow the space to be used for other purposes.					\$	200,000				
W-14	<b>Demolish Old Backwash Tank:</b> The structure is not able to be upgraded and removing it would allow the space to be used for other purposes. The proposed new pumps for the GAC project will also be capable of backwashing filters.					\$	30,000				

#### HBPW PROPOSED FIVE YEAR PLAN OF CAPITAL IMPROVEMENTS WATER DEPARTMENT



PROJECT#	PROJECT DESCRIPTION	20	24 - 2025	20	25 - 2026	20	26 - 2027	2	027 - 2028	20	28 - 2029
W-15	Indian Mounds Water Tower Repainting: To replace the current application of paint, which will be nearing the end of its useful life. Tank was last painted in 2003. This will require containment. This project will be bid together with the Veterans water tower.					\$	500,000				
W-16	<b>Veterans Water Tower Repainting:</b> To replace the current application of paint, which will be nearing the end of its useful life. Tank constructed in 2001. This will require containment.			\$	500,000						
W-17	Chemical Building Roof: This is in need of replacement.					\$	30,000				
W-18	<b>WonderWare Upgrades:</b> Upgrades to the SCADA system to be split with the WWTP.	\$	100,000								
W-19	<b>Pump House Upgrade:</b> Evaluation of the pump house to determine necessary equipment and facility upgrades as well as upgrades to the controls and variable frequency drives (VFDs).					\$	50,000	\$	1,450,000		
W-20	Old Intake Rehab: Inspection of the old intake valve by a diver to determine repairs needed.					\$	250,000				
W-21	<b>Security Cameras:</b> Install security cameras at the plant to be monitored 24 hours a day.			\$	7,500						
SUBTOTAL	WATER PROJECTS	\$	870,000	\$	942,500	\$	1,480,000	\$	1,910,000	\$	2,020,000
PROPOSED	- · · · · · · · · · · · · · · · · · · ·										
	Y CAPITAL CONTRIBUTIONS/ GRANT FUNDING										
FROM BPW	FUNDS	\$	870,000	\$	942,500	\$	1,480,000	\$	1,910,000	\$	2,020,000

## HBPW PROPOSED FIVE YEAR PLAN OF CAPITAL IMPROVEMENTS SEWER DEPARTMENT



PROJECT #	PROJECT DESCRIPTION	20	24 - 2025	20	25 - 2026	20	26 - 2027	20	27 - 2028	20	28 - 2029
	COLLECTION SYSTEM UPGRADES										
S-1	Infrastructure Renewal/Replacement: Ongoing yearly expenses for I & I corrections. These funds could go for investigation (flow meters), engineering, and repairs.	\$	100,000	\$	100,000	\$	100,000	\$	100,000	\$	100,000
S-2	Downtown Sanitary Sewer Overflow (SSO) Elimination: A portion of this project may be funded by the remaining bonding capacity from the Sewer Bond issue. We are committed to continuing efforts to eliminate the SSO. It may include I&I monitoring, manhole lining equipment/contracting, an easement cleaning machine, flow monitors, relining of specific sewer lines, and elimination of unneeded sewer lines.		500,000		500,000	\$	500,000	\$	500,000	\$	500,000
S-3	<b>Utility Relocations/Community Development:</b> The City and State have projects that come up throughout the year in which utilities need to be relocated. The Board approved a policy to budget a certain amount yearly to fund these relocations.		10,000	\$	10,000	\$	10,000	\$	10,000	\$	10,000
S-4	<b>Lift Station Rehabilitations:</b> Currently there are 18 lift stations in the sanitary sewer system. These funds would be for the continuous updating and replacement of the electrical, mechanical, and structural components of one lift station per year. Costs are estimated to be \$20,000 to \$50,000 depending on the lift station.		50,000	\$	50,000	\$	50,000	\$	50,000	\$	50,000
	WASTEWATER TREATMENT PLANT										
S-5	<b>NPDES Permit:</b> This will involve improvements/changes to the existing treatment process driven by more stringent permit regulations.		150,000	\$	250,000						

## HBPW PROPOSED FIVE YEAR PLAN OF CAPITAL IMPROVEMENTS SEWER DEPARTMENT



PROJECT #	PROJECT DESCRIPTION	20	24 - 2025	202	25 - 2026	20	26 - 2027	202	27 - 2028	2028 -	- 2029
S-6	Electric Upgrades to the Oxygen and Digested Pump Buildings/RAS Pump Building Breaker Panels: Part of this project is to replace the existing electrical controls in the Oxygen and Digested pump buildings. The existing system was installed in 1981, and is nearing the end of its useful life. The remainder of this project will be to replace the breaker panels on the RAS Pump building. These are original (40+ years old) and parts are becoming more expensive. Replacement will require an engineer to assess.	\$	200,000								
S-7	<b>Compressors:</b> We have had significant issues with these over the last 2 years which has caused significant O&M costs. These will need to be replaced.	\$	165,000			\$	165,000				
S-8	Wilson Street Lift Station: The structure is subject to flooding, though it is not designed to handle the forces of floodwaters. The first year funds would be for engineering costs for an evaluation of alternatives to the current structure and equipment, followed by construction in the following year.			\$	35,000	\$	300,000				
S-9	Chlorine Building Roof Replacement: The current roof dates to 1993 and is approaching the end of its useful life. All other roofs were replaced with the 2013 bond proceeds.					\$	30,000				
S-10	Clarifier Rehab: To coat all 3 clarifiers to extend their useful life and improve their function and efficiency. This would also include new drain valves to allow flexibility in taking down the clarifiers for maintenance.	\$	300,000	\$	300,000	\$	50,000	\$	300,000		
S-11	<b>Storage Shed:</b> Material is currently being housed in the chlorine building and elsewhere and this would allow for consolidation of material.	\$	50,000								
S-12	<b>WonderWare Upgrades:</b> Upgrades to the SCADA system to be split with the WTP.	\$	100,000								

## HBPW PROPOSED FIVE YEAR PLAN OF CAPITAL IMPROVEMENTS SEWER DEPARTMENT



PROJECT#	PROJECT DESCRIPTION	20	24 - 2025	2	025 - 2026	2	026 - 2027	2	027 - 2028	20	28 - 2029
S-13	Grit Chamber / Bar Screen / Influent Pump: Adding a coarse bar screen and rehabbing the grit chamber to reduce solids coming into the plant. This will require new piping.										
3-13	Would also possibly replace the gate valve at the head of the plant to allow for flow shut off if needed.					\$	750,000	\$	1,250,000		
S-14	<b>Security Cameras:</b> Install security cameras at the plant to be monitored 24 hours a day.			\$	7,500						
	VEHICLES										
S-15	<b>Fleet Management:</b> Continuous upgrades of the company fleet. Replace approximately one sewer department utility vehicle every other year.			\$	50,000			\$	50,000		
S-16	Sewer Cleaning and Vacuum Truck: Currently there are two vacuum trucks. This new truck would replace the older of the two (a 2008 model - truck 37).			\$	500,000						
SUBTOTAL	SEWER PROJECTS	\$	1,625,000	\$	1,802,500	\$	1,955,000	\$	2,260,000	\$	660,000
PROPOSED	FINANCING		·								
THIRD PART	TY CAPITAL CONTRIBUTIONS/ GRANT FUNDING										
FROM BPW	FUNDS	\$	1,625,000	\$	1,802,500	\$	1,955,000	\$	2,260,000	\$	660,000

## HBPW PROPOSED FIVE YEAR PLAN OF CAPITAL IMPROVEMENTS STORMWATER DEPARTMENT



PROJECT #	PROJECT DESCRIPTION	2	024 - 2025	2	025 - 2026	20	26 - 2027	20	27 - 2028	20:	28 - 2029
	COLLECTION SYSTEM UPGRADES										
	Hydraulic-Analysis Study: Contracted full assessment of										
SW-1	the stormwater system to determine the areas needed for										
	replacement.	\$	750,000	\$	500,000						
	Stormwater Utility Establishment: After a funding source										
	is established, the 1st year would include items to allow the										
	stormwater department to begin making repairs, such as 1-2										
CM 2	vehicles, a vac truck, a dump truck, etc. The subsequent										
SW-2	years would include the construction work for the system.										
	Financing would likely be obtained first to provide cash up										
	front until revenue recognition begins in January 2026.										
		\$	500,000	\$	800,000	\$	800,000	\$	800,000	\$	800,000
SUBTOTAL	STORMWATER PROJECTS	\$	1,250,000	\$	1,300,000	\$	800,000	\$	800,000	\$	800,000
<b>PROPOSED</b>	FINANCING	\$	1,250,000	\$	1,300,000	\$	800,000				
FROM BPW	FUNDS	\$	-	\$	•	\$	_	\$	800,000	\$	800,000

### HBPW PROPOSED FIVE YEAR PLAN OF CAPITAL IMPROVEMENTS SUMMARY OF ALL DEPARTMENTS



	2	024 - 2025	2	2025 - 2026	2	026 - 2027	2	027 - 2028	20	028 - 2029
SUBTOTAL ADMINISTRATIVE PROJECTS	\$	505,000	\$	657,500	\$	450,000	\$	450,000	\$	450,000
PROPOSED FINANCING		-		-		-		-		-
THIRD PARTY CAPITAL CONTRIBUTIONS/ GRANT FUNDING		-		-		-		-		-
FROM BPW FUNDS	\$	505,000	\$	657,500	\$	450,000	\$	450,000	\$	450,000
SUBTOTAL IT PROJECTS	\$	151,000	\$	45,000	\$	45,000	\$	45,000	\$	105,000
PROPOSED FINANCING		_		_		-		_		_
THIRD PARTY CAPITAL CONTRIBUTIONS/ GRANT FUNDING		_		-		_		-		_
FROM BPW FUNDS	\$	151,000	\$	45,000	\$	45,000	\$	45,000	\$	105,000
OUDTOTAL ELECTRIC PROJECTO	Ιφ	F 050 500	I &	4 400 500	Α	4.040.000	Α	000.000	Φ.	0.040.000
SUBTOTAL ELECTRIC PROJECTS	\$	5,059,500	<b>\$</b>	1,462,500	\$	1,040,000	\$	990,000	\$	2,319,800
PROPOSED FINANCING	-	2,800,000	┝	-				500,000		1,500,000
THIRD PARTY CAPITAL CONTRIBUTIONS/ GRANT FUNDING	_	-	_	4 400 500		4 0 40 000	_	400.000	_	329,800
FROM BPW FUNDS	\$	2,259,500	<b>\$</b>	1,462,500	<b>\$</b>	1,040,000	\$	490,000	\$	490,000
SUBTOTAL WATER PROJECTS	<b>S</b>	870,000	<b>S</b>	942,500	\$	1,480,000	\$	1,910,000	\$	2,020,000
PROPOSED FINANCING	۳	-	۳	J+Z,000 -	Ψ	1,400,000	Ψ	1,010,000	Ψ	2,020,000
THIRD PARTY CAPITAL CONTRIBUTIONS/ GRANT FUNDING	t	_	$\vdash$	_		_		_		_
FROM BPW FUNDS	\$	870,000	\$	942,500	\$	1,480,000	\$	1,910,000	\$	2,020,000
	<u> </u>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,	•	,,		,,	•	, ,
SUBTOTAL SEWER PROJECTS	\$	1,625,000	\$	1,802,500	\$	1,955,000	\$	2,260,000	\$	660,000
PROPOSED FINANCING		-		-		-		-		-
THIRD PARTY CAPITAL CONTRIBUTIONS/ GRANT FUNDING		-		-		-		-		_
FROM BPW FUNDS	\$	1,625,000	\$	1,802,500	\$	1,955,000	\$	2,260,000	\$	660,000
SUBTOTAL STORMWATER PROJECTS	\$	1,250,000	\$	, ,	\$	800,000	\$	800,000	\$	800,000
PROPOSED FINANCING		1,250,000		1,300,000		800,000		-		_
THIRD PARTY CAPITAL CONTRIBUTIONS/ GRANT FUNDING		-		-		-		-		_
FROM BPW FUNDS	\$	-	\$	-	\$	-	\$	800,000	\$	800,000
	1 4	- 100 FC -		201205	_		_		_	
FIVE YEAR PLAN DEPARTMENT TOTALS	\$	9,460,500	\$	6,210,000	\$	5,770,000	\$	6,455,000	\$	6,354,800
PROPOSED FINANCING	_	4,050,000		1,300,000		800,000		500,000		1,500,000
THIRD PARTY CAPITAL CONTRIBUTIONS/ GRANT FUNDING	<u> </u>	-	Ļ	-	_	-	_	-	_	329,800
FIVE YEAR PLAN TOTAL FROM BPW FUNDS	\$	5,410,500	\$	4,910,000	\$	4,970,000	\$	5,955,000	\$	4,525,000