

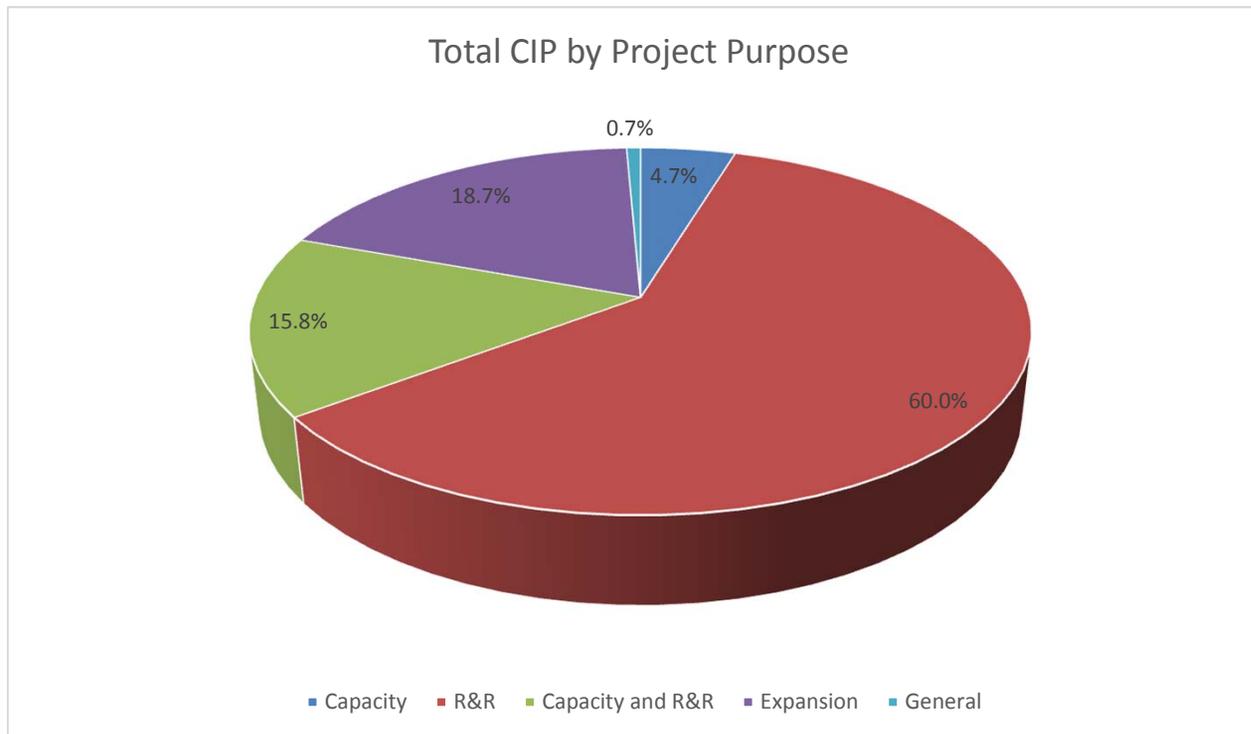
APPENDIX H – CAPITAL IMPROVEMENT COSTS DETAILS

Table Detailed Capital Improvement Plan Collection System Master Plan City of Grants Pass																		
Project Description				Project Size and Cost										Project Phasing				
Improv. ID	Improvement Type	Project Type	Address Description	Installation Year	Existing Size	Proposed Size	Replace/ New	Length (ft)	Unit Cost ⁽¹⁾	Baseline Construction Cost ⁽²⁾	Estimated Construction Cost ⁽³⁾	Total Allied Project Cost	Total Capital Improvement Cost ^{(2),(3),(4)}	Phase 1 (2015-2020)	Phase 2 (2021-2025)	Phase 3 (2026-2035)		
													20%	30%	25%			
Project 1 - SW Western Street / SW Spruce Street																		
P-1A	Gravity	Capacity and R&R	Along SW Western Ave between I St and K St	1947	8	12	Upsize	581	\$162	\$94,100	\$112,900	\$147,000	\$184,000	\$184,000				
P-1B	Gravity	Capacity and R&R	Along SW Western Ave between K St and SW Bridge St	1947	10	15	Upsize	546	\$183	\$99,800	\$119,800	\$156,000	\$195,000	\$195,000				
P-1C	Gravity	Capacity and R&R	Along SW Spruce St between SW Bridge St and Webster Rd	1966	8	18	Upsize	1,998	\$203	\$405,600	\$486,700	\$633,000	\$791,000	\$791,000				
P-1D	Gravity	Capacity and R&R	Along SW Bridge St between SW Western Ave and SW Westhom Ave between Manholes B31 and B30	1947	10	18	Upsize	174	\$203	\$35,300	\$42,400	\$55,000	\$69,000	\$69,000				
P-1E	Plug	Capacity	Plug pipe to east Bridge St (between B108 and B21) and reroute Bridge St Pump Station 8-inch force main (from B108) to SW Spruce St sewer	-	10	-	Plug	-	-	-	-	-	-	-				
P-1F	Gravity	R&R	Along SW Western Ave between SW Jordan St and SW I St	1947	8	8	Upsize	2,271	\$134	\$304,300	\$365,200	\$475,000	\$594,000	\$594,000				
Total Project 1 - SW Western / SW Spruce Street										\$939,100	\$1,127,000	\$1,466,000	\$1,833,000	\$1,833,000	\$0	\$0		
Project 2-1 - NW Highland Street																		
P-2A	Gravity	Capacity	Along NW Highland Ave between 300 ft north of NW Parker Dr and NW Midland Ave	1966	8	12	Upsize	939	\$162	\$152,100	\$182,500	\$237,000	\$296,000	\$296,000				
Total Project 2-1 - NW Highland Street										\$152,100	\$182,500	\$237,000	\$296,000	\$296,000	\$0	\$0		
Project 2-2 - NW Prospect Street																		
P-2B	Gravity	Capacity and R&R	Along NW Midland Ave between NW Highlands Ave and NW Prospect Ave	1963	8	12	Upsize	623	\$162	\$100,900	\$121,100	\$157,000	\$196,000	\$196,000				
P-2C	Gravity	Capacity and R&R	Along NW Prospect Ave between NW Midland Ave and 150 feet south of NW Sandy Dr	1963	10	15	Upsize	834	\$183	\$152,600	\$183,100	\$238,000	\$298,000	\$298,000				
Total Project 2-2 - NW Prospect Street										\$253,500	\$304,200	\$395,000	\$494,000	\$0	\$494,000	\$0		
Project 3 - NW Midland Avenue																		
P-3A	Gravity	Capacity	Along Midland Ave between NW 6th St and NW Washington Blvd	-	-	12	New	710	\$162	\$115,000	\$138,000	\$179,000	\$224,000	\$224,000				
Total Project 3 - NW Midland Avenue										\$115,000	\$138,000	\$179,000	\$224,000	\$224,000	\$0	\$0		
Project 4 - NE A Street																		
P-4A	Gravity	Capacity and R&R	Along NE A St between NE 9th St and NE 7th St	1926	12	18	Upsize	844	\$203	\$171,300	\$205,600	\$267,000	\$334,000	\$334,000				
Total Project 4 - NE A Street										\$171,300	\$205,600	\$267,000	\$334,000	\$334,000	\$0	\$0		
Project 5 - NE Savage Street / NE 9th Street																		
P-5A	Gravity	Capacity and R&R	Along NE Savage St between NE 10th St and NE 9th St and along NE 9th St between NE Savage St and NE Josephine St	1928 - 1947	8	12	Upsize	3,431	\$162	\$555,700	\$666,800	\$867,000	\$1,084,000	\$1,084,000				
Total Project 5 - NE Savage Street / NE 9th Street										\$555,700	\$666,800	\$867,000	\$1,084,000	\$1,084,000	\$0	\$0		
Project 6 - SE Mill Street / SE Rogue View Lane																		
P-6A	Gravity	Capacity and R&R	Along SE Mill St between NE D St and SE M St	1947	12	18	Upsize	3,755	\$203	\$762,300	\$914,800	\$1,189,000	\$1,486,000	\$1,486,000				
P-6B	Gravity	Capacity and R&R	Along SE M St between SE Mill St and SE 12th St	1947	12	21	Upsize	907	\$223	\$202,300	\$242,800	\$316,000	\$395,000	\$395,000				
P-6C	Gravity	Capacity and R&R	Along SE M St between SE 12th St and SE 7th St	-	-	21	New	2,177	\$223	\$485,500	\$582,600	\$757,000	\$946,000	\$946,000				
Total Project 6 - SE Mill Street / SE Rogue View Lane										\$1,450,100	\$1,740,200	\$2,262,000	\$2,827,000	\$2,827,000	\$0	\$0		
Project 7 - Annabelle Lane																		
P-7A	Gravity	Capacity	RSSD Interceptor between Wineteer Ln To Leonard Rd	1974	15	21	Upsize	1,948	\$223	\$434,400	\$521,300	\$678,000	\$848,000	\$848,000				
Total Project 7 - Annabelle Lane										\$434,400	\$521,300	\$678,000	\$848,000	\$0	\$848,000	\$0		
Project 8 - Dowell Road																		
P-8A	Gravity	Capacity	Along Dowell Rd between Redwood Ave to south of Mesman Dr	1974	8	12	Upsize	888	\$162	\$143,900	\$172,700	\$225,000	\$281,000	\$281,000				
P-8B	Gravity	Capacity	Along Dowell Rd between south of Mesman Dr and intersection of Leonard Rd with Mesman Dr	1974	8	15	Upsize	384	\$183	\$70,300	\$84,400	\$110,000	\$138,000	\$138,000				
Total Project 8 - Dowell Road										\$214,200	\$257,100	\$335,000	\$419,000	\$419,000	\$0	\$0		
Project 9 - Gilbert Creek Park																		
P-9A	Gravity	Capacity	Along Gilbert Creek Park 500 ft north of NW Parker Dr and west of NW Hawthorne Ave	1967	8	12	Upsize	451	\$162	\$73,100	\$87,700	\$114,000	\$143,000			\$143,000		
Total Project 9 - Gilbert Creek Park										\$73,100	\$87,700	\$114,000	\$143,000	\$0	\$0	\$143,000		
Project 10-1 - Rogue River / SE Blue Bird Drive																		
P-10A	Gravity	Capacity and R&R	Along Rogue Dr between SE N St and SE Blue Bird Dr	1962 - 1967	15	18	Upsize	1,831	\$203	\$371,600	\$445,900	\$580,000	\$725,000		\$725,000			
P-10B	Gravity	Capacity and R&R	Through properties on north bank of river, south of Waterman Ln and Lela Ln to Blue Bird Dr	1962	12	15	Upsize	1,890	\$183	\$345,800	\$415,000	\$540,000	\$675,000		\$675,000			
Total Project 10-1 - Rogue River / SE Blue Bird Drive										\$717,400	\$860,900	\$1,120,000	\$1,400,000	\$0	\$1,400,000	\$0		
Project 10-2 - West SE Blue Bird Drive																		
P-10C	Gravity	Capacity and R&R	Through properties on north bank of river, from Blue Bird Dr to just upstream of pipe split under Rogue River	1962	18	24	Upsize	2,208	\$244	\$538,800	\$646,600	\$841,000	\$1,051,000			\$1,051,000		
Total Project 10-2 - Rogue River / SE Blue Bird Drive										\$538,800	\$646,600	\$841,000	\$1,051,000	\$0	\$0	\$1,051,000		
Project 11 - Park Street																		
P-11A	Gravity	Capacity and R&R	Through properties on south bank of the river between Mystic Dr and Gold River Ln	1962	18	27	Upsize	202	\$275	\$55,400	\$66,500	\$86,000	\$108,000		\$108,000			
P-11B	Gravity	Capacity and R&R	Through properties on south bank of the river between Gold River Dr and SE Acacia Ln	1962	24	27	Upsize	795	\$275	\$218,300	\$262,000	\$341,000	\$426,000		\$426,000			
Total Project 11 - Park Street										\$273,700	\$328,500	\$427,000	\$534,000	\$0	\$534,000	\$0		
Project 12 - Darneille Lane																		
P-12A	Gravity	Capacity	Along Darneille Ln between the intersection of Darneille Ln with SW Harvest Dr and Darneille PS	1974	12	18	Upsize	1,551	\$203	\$314,800	\$377,800	\$491,000	\$614,000			\$614,000		
Total Project 12 - Darneille Lane										\$314,800	\$377,800	\$491,000	\$614,000	\$0	\$0	\$614,000		
Project 13 - Mesman Drive to Coutant Lane																		
P-13A	Gravity	Capacity	RSSD Interceptor between Mesman Dr and Schroeder Ln	1974	18	21	Upsize	2,047	\$223	\$456,400	\$547,700	\$712,000	\$890,000			\$890,000		
P-13B	Gravity	Capacity	RSSD Interceptor between Schroeder Ln and Coutant Ln	1974	18	24	Upsize	1,282	\$244	\$312,800	\$375,400	\$488,000	\$610,000			\$610,000		
Total Project 13 - Mesman Drive to Coutant Lane										\$769,200	\$923,100	\$1,200,000	\$1,500,000	\$0	\$0	\$1,500,000		
Project 14 - NE 7th Street																		
P-14A	Gravity	Capacity and R&R	Along NE 7th Street between NE A St and NW F St	1926	12	18	Upsize	1,531	\$203	\$310,800	\$373,000	\$485,000	\$606,000		\$606,000			

Project Description				Project Size and Cost										Project Phasing		
Improv. ID	Improvement Type	Project Type	Address Description	Installation Year	Existing Size	Proposed Size	Replace/ New	Length (ft)	Unit Cost ⁽¹⁾	Baseline Construction Cost ⁽²⁾	Estimated Construction Cost ⁽³⁾	Total Allied Project Cost	Total Capital Improvement Cost ^{(2),(3),(4)}	Phase 1 (2015-2020)	Phase 2 (2021-2025)	Phase 3 (2026-2035)
P-R&R-4A	Gravity	R&R	South of Rogue River	-	8 and less	8	Replace	1,402	\$134	\$187,900	\$225,500	\$293,000	\$366,000		\$366,000	
P-R&R-4B	Gravity	R&R	South of Rogue River	-	10	10	Replace	76	\$147	\$11,100	\$13,300	\$17,000	\$21,000		\$21,000	
P-R&R-4C	Gravity	R&R	South of Rogue River	-	15	15	Replace	417	\$183	\$76,300	\$91,600	\$119,000	\$149,000		\$149,000	
P-R&R-4D	Gravity	R&R	South of Rogue River	-	30	30	Replace	542	\$302	\$163,700	\$196,400	\$255,000	\$319,000		\$319,000	
Total Project R&R-4 - Condition Only Projects - Phase 2 South of Rogue River										\$439,000	\$526,800	\$684,000	\$855,000	\$0	\$855,000	\$0
Project R&R-5 - Condition Only Projects - Phase 3 North of Rogue River																
P-R&R-5A	Gravity	R&R	North of Rogue River	-	8 and less	8	Replace	59,905	\$134	\$8,027,200	\$9,632,600	\$12,522,000	\$15,653,000			\$15,653,000
P-R&R-5B	Gravity	R&R	North of Rogue River	-	10	10	Replace	6,181	\$147	\$908,700	\$1,090,400	\$1,418,000	\$1,773,000			\$1,773,000
P-R&R-5C	Gravity	R&R	North of Rogue River	-	12	12	Replace	2,760	\$162	\$447,100	\$536,500	\$697,000	\$871,000			\$871,000
P-R&R-5D	Gravity	R&R	North of Rogue River	-	15	15	Replace	433	\$183	\$79,200	\$95,000	\$124,000	\$155,000			\$155,000
P-R&R-5E	Gravity	R&R	North of Rogue River	-	18	18	Replace	217	\$203	\$44,100	\$52,900	\$69,000	\$86,000			\$86,000
P-R&R-5F	Gravity	R&R	North of Rogue River	-	21	21	Replace	243	\$223	\$54,200	\$65,000	\$85,000	\$106,000			\$106,000
P-R&R-5G	Gravity	R&R	North of Rogue River	-	24	24	Replace	914	\$244	\$222,900	\$267,500	\$348,000	\$435,000			\$435,000
P-R&R-5H	Gravity	R&R	North of Rogue River	-	48	48	Replace	22	\$386	\$8,300	\$10,000	\$13,000	\$16,000			\$16,000
Total Project R&R-5 - Condition Only Projects - Phase 3 North of Rogue River										\$9,791,700	\$11,749,900	\$15,276,000	\$19,095,000	\$0	\$0	\$19,095,000
Project R&R-6 - Condition Only Projects - Phase 3 South of Rogue River																
P-R&R-6A	Gravity	R&R	South of Rogue River	-	8 and less	8	Replace	19,049	\$134	\$2,552,600	\$3,063,100	\$3,982,000	\$4,978,000			\$4,978,000
P-R&R-6B	Gravity	R&R	South of Rogue River	-	10	10	Replace	3,525	\$147	\$518,200	\$621,800	\$808,000	\$1,010,000			\$1,010,000
P-R&R-6C	Gravity	R&R	South of Rogue River	-	12	12	Replace	4,499	\$162	\$728,800	\$874,600	\$1,137,000	\$1,421,000			\$1,421,000
P-R&R-6D	Gravity	R&R	South of Rogue River	-	15	15	Replace	2,556	\$183	\$467,700	\$561,200	\$730,000	\$913,000			\$913,000
P-R&R-6E	Gravity	R&R	South of Rogue River	-	18	18	Replace	1,228	\$203	\$249,400	\$299,300	\$389,000	\$486,000			\$486,000
P-R&R-6F	Gravity	R&R	South of Rogue River	-	24	24	Replace	1,164	\$244	\$284,100	\$340,900	\$443,000	\$554,000			\$554,000
P-R&R-6G	Gravity	R&R	South of Rogue River	-	27	27	Replace	5,276	\$275	\$1,448,300	\$1,738,000	\$2,259,000	\$2,824,000			\$2,824,000
P-R&R-6G	Gravity	R&R	South of Rogue River	-	30	30	Replace	1,524	\$302	\$460,300	\$552,400	\$718,000	\$898,000			\$898,000
Total Project R&R-6 - Condition Only Projects - Phase 3 South of Rogue River										\$6,709,400	\$8,051,300	\$10,466,000	\$13,084,000	\$0	\$0	\$13,084,000
Project 27 - General Projects																
G-1	General	General	Asset Management Program	-	-	-	-	1	\$77,000	\$77,000	\$92,400	\$120,000	\$150,000	\$150,000		
G-2A	General	General	Master Plan Updates (2021)	-	-	-	-	1	NA	\$180,000	\$225,000	\$293,000	\$300,000		\$300,000	
G-2B	General	General	Master Plan Updates (2031)	-	-	-	-	1	NA	\$180,000	\$225,000	\$293,000	\$300,000			\$300,000
Total Project 27 - General Projects										\$437,000	\$542,400	\$706,000	\$750,000	\$150,000	\$300,000	\$300,000
Total CIP (\$)										\$55,632,400	\$66,985,600	\$87,150,000	\$108,736,000	\$30,262,000	\$24,529,000	\$53,945,000
Total CIP (%)														27.8%	22.6%	49.6%
Total Capacity Only Projects (\$)										\$2,611,700	\$3,134,200	\$4,075,000	\$5,095,000	\$1,924,000	\$914,000	\$2,257,000
Total Capacity Only Projects (%)										4.7%	4.7%	4.7%	4.7%	6.4%	3.7%	4.2%
Total Repair and Replacement Projects (\$)										\$33,479,000	\$40,175,400	\$52,228,000	\$65,286,000	\$16,977,000	\$16,130,000	\$32,179,000
Total Repair and Replacement Projects (%)										60.2%	60.0%	59.9%	60.0%	56.1%	65.8%	59.7%
Total Capacity and R&R Projects (\$)										\$8,764,700	\$10,684,900	\$13,892,000	\$17,232,000	\$11,211,000	\$4,032,000	\$1,989,000
Total Capacity and R&R Projects (%)										15.8%	16.0%	15.9%	15.8%	37.0%	16.4%	3.7%
Total Expansion Projects (\$)										\$10,340,000	\$12,448,700	\$16,249,000	\$20,373,000	\$0	\$3,153,000	\$17,220,000
Total Expansion Projects (%)										18.6%	18.6%	18.6%	18.7%	0.0%	12.9%	31.9%
Total General Projects (\$)										\$437,000	\$542,400	\$706,000	\$750,000	\$150,000	\$300,000	\$300,000
Total General Projects (%)										0.8%	0.8%	0.8%	0.7%	0.5%	1.2%	0.6%
Total Pipe Projects (\$)										\$49,043,400	\$58,852,400	\$76,511,000	\$95,645,000	\$24,360,000	\$21,509,000	\$49,776,000
Total Pipe Only Projects (%)										88.2%	87.9%	87.8%	88.0%	80.5%	87.7%	92.3%
Total PS Projects (\$)										\$4,206,500	\$5,256,200	\$6,899,000	\$8,549,000	\$5,752,000	\$1,984,000	\$813,000
Total PS Projects (%)										7.6%	7.8%	7.9%	7.9%	19.0%	8.1%	1.5%
Total Casing Projects (\$)										\$938,600	\$1,126,300	\$1,464,000	\$1,830,000	\$0	\$385,000	\$1,445,000
Total Casing Projects (%)										1.7%	1.7%	1.7%	1.7%	0.0%	1.6%	2.7%
Total Force Main Projects (\$)										\$1,006,900	\$1,208,300	\$1,570,000	\$1,962,000	\$0	\$351,000	\$1,611,000
Total Force Main Projects (%)										1.8%	1.8%	1.8%	1.8%	0.0%	1.4%	3.0%
Notes:																
(1) ENR CCI = 10,037 (20-City Average, July 2015).																
(2) Baseline Construction Costs = Length x Unit Cost																
(3) Estimated Construction Cost includes a 20% construction contingency applied to the Baseline Construction Cost to account for unforeseen events and unknown conditions.																
(4) Capital Improvement Cost includes a 25% contingency applied to the Estimated Construction Cost to account for engineering services, construction management, and project administration.																

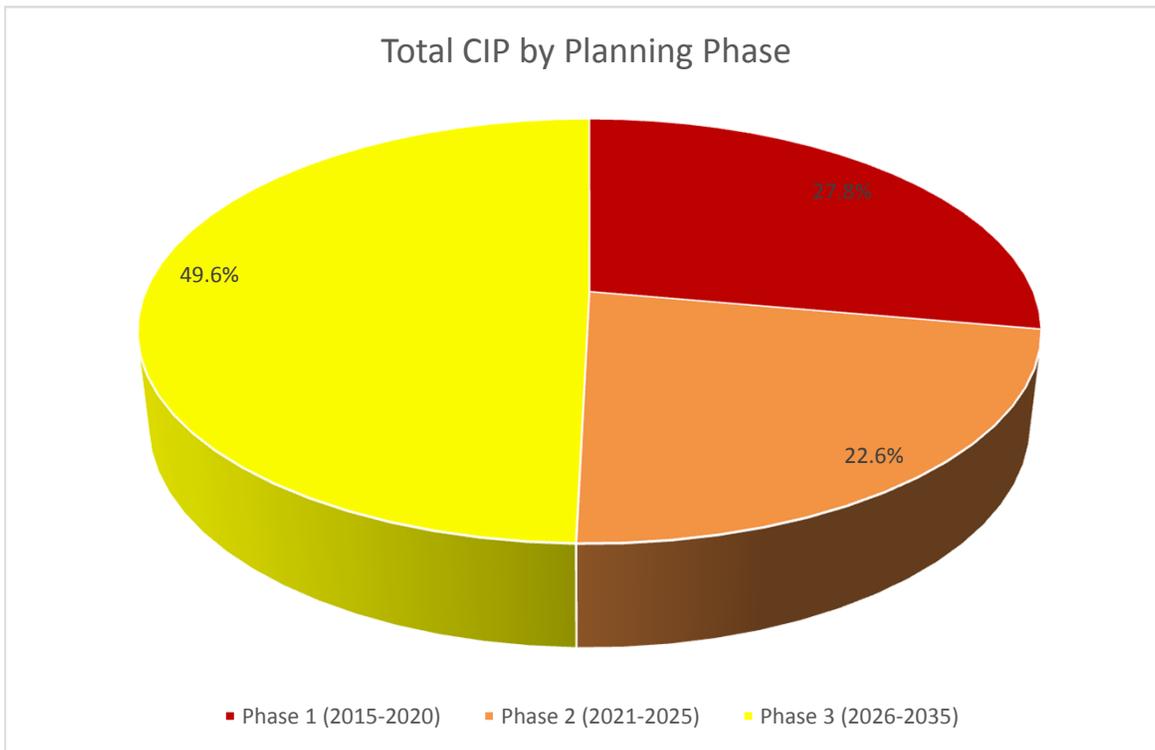
1. Total CIP by Project Purpose

	Total CIP (\$)	Percent (%)	Phase 1 (2015-2020)	Phase 2 (2021-2025)	Phase 3 (2026-2035)
Capacity	\$ 5,095,000	4.7%	\$ 1,924,000	\$ 914,000	\$ 2,257,000
R&R	\$ 65,286,000	60.0%	\$ 16,977,000	\$ 16,130,000	\$ 32,179,000
Capacity and R&R	\$ 17,232,000	15.8%	\$ 11,211,000	\$ 4,032,000	\$ 1,989,000
Expansion	\$ 20,373,000	18.7%	\$ -	\$ 3,153,000	\$ 17,220,000
General	\$ 750,000	0.7%	\$ 150,000	\$ 300,000	\$ 300,000
Total	\$ 108,736,000	100.0%	\$ 30,262,000	\$ 24,529,000	\$ 53,945,000



2. Total CIP by Planning Phase

	Total CIP (\$)	Percent (%)	Annual Average (\$)
Phase 1 (2015-2020)	\$ 30,262,000	27.8%	\$ 5,043,667
Phase 2 (2021-2025)	\$ 24,529,000	22.6%	\$ 4,905,800
Phase 3 (2026-2035)	\$ 53,945,000	49.6%	\$ 5,394,500
Total	\$ 108,736,000	100.0%	\$ 5,177,905



3. Total CIP by Improvement Type

	Total CIP (\$)	Percent (%)	Phase 1 (2015-2020)	Phase 2 (2021-2025)	Phase 3 (2026-2035)
Gravity	\$ 95,645,000	88.0%	\$ 24,360,000	\$ 21,509,000	\$ 49,776,000
Pump Station	\$ 8,549,000	7.9%	\$ 5,752,000	\$ 1,984,000	\$ 813,000
Casing	\$ 1,830,000	1.7%	\$ -	\$ 385,000	\$ 1,445,000
Force Main	\$ 1,962,000	1.8%	\$ -	\$ 351,000	\$ 1,611,000
General	\$ 750,000	0.7%	\$ 150,000	\$ 300,000	\$ 300,000
Total	\$ 108,736,000	100.0%	\$ 30,112,000	\$ 24,229,000	\$ 53,645,000

