

Newport MUD - Capital Improvement Plan

LAN Job No. 120-12151-000-100

As of 3/6/23, CIP in 2022\$

Item	Status	Amount	\$5,500,000	\$4,225,000	\$7,500,000	\$20,840,000	Projected Year when Funds will be needed									
			Bond Issue #4 2016	Bond Issue #5 2018	Bond Issue #6 2019	Actual Bond Issue #7 2021/2022	Bond Issue 8 2022	2023	2024	2025	2026	2027	2028	2029	2030	
DISTRICT IMPROVEMENTS & REHABILITATION																
1	Surface Water Plant (including GW Well @ SWTP), page 9	Adjustments due to increased construction costs, projects no longer applicable due to Purifics filters and priority changes.	\$50,000	\$0	\$470,000	\$7,820,000	\$0	\$4,000,000	\$0	\$0	\$0	\$0	\$1,920,000	\$0	\$0	\$350,000
2	Ground Water Plants, page 10	Adjustments due to increased construction costs and priority changes.	\$0	\$0	\$15,000	\$240,000	\$0	\$0	\$0	\$0	\$0	\$0	\$710,000	\$0	\$0	\$160,000
3	Water Distribution System, page 3 (includes SDH Bridge Relo)	Adjustments due to increased construction costs. Additional needs identified. TxDOT requirement for SDH.	\$0	\$0	\$0	\$970,000	\$0	\$550,000	\$1,240,000	\$1,620,000	\$1,300,000	\$1,350,000	\$1,130,000	\$1,140,000	\$1,420,000	
4	Sanitary Sewer System, page 4 (includes SDH Bridge Relo)	Adjustments due to increased construction costs. Evaluations show ~40-50% of system needs rehab. Lines deeper than originally assumed. TxDOT requirement for SDH.	\$0	\$1,142,900	\$765,417	\$2,720,000	\$0	\$2,000,000	\$0	\$950,000	\$1,020,000	\$1,100,000	\$1,080,000	\$1,030,000	\$1,050,000	
5	Lift Station & Force Mains, page 5 & 6	Adjustments due to increased construction costs and priority changes.	\$0	\$0	\$110,000	\$440,000	\$0	\$0	\$352,000	\$100,000	\$100,000	\$265,000	\$0	\$80,000	\$90,000	
6	Wastewater Treatment Plant, page 7 & 8 (includes new Berm Costs)	Adjustments due to increased construction costs and increase in scope of work required by HCFCF for WWTP berm.	\$395,000	\$0	\$819,583	\$500,000	\$0	\$0	\$0	\$7,200,000	\$16,500,000	\$17,840,000	\$0	\$0	\$3,450,000	
7	Detention Ponds, page 11	District Owned	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
8	Administration Building	District Owned	\$250,000	\$0	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
9	Water Line Ext. Phase 1 to serve Compass Tr Defined Area	District Commitment	\$190,000						\$190,000							
10	Water Line Ext. Phase 2 to serve Compass Tr Defined Area	District Commitment	\$270,000							\$270,000						
11	Force Main Phase 1 to serve Compass Tr Defined Area	District Commitment	\$470,000						\$470,000							
12	Force Main Phase 2 to serve Compass Tr Defined Area	District Commitment	\$960,000							\$960,000						
13	Lift Station to serve Compass Tr. Defined Area	District Commitment	\$860,000						\$860,000							
DISTRICT ITEMS TOTAL			\$445,000	\$1,142,900	\$2,180,000	\$12,940,000	\$0	\$6,550,000	\$3,112,000	\$11,100,000	\$18,920,000	\$23,185,000	\$2,210,000	\$2,250,000	\$6,520,000	
INFRASTRUCTURE EXPANSION																
1	Newport Court, Developer Reimbursement (Compass)	Bond Issue #6	\$1,147,442			\$1,147,442										
2	Newport Section 4, Partial Replat 1, Dev. Reim. (Katt)	Bond Issue #6	\$360,516			\$360,516										
3	Newport Section 4, PR 4 (DH Builders)	Future Reimbursement	\$220,000						\$220,000							
4	Newport Section 6, Partial Replat 1, Dev. Reim. (Rochester)	Bond Issue #7	\$330,596			\$330,596										
5	Newport Section 7, PR1, PR3, DP Developer Reim. (Lennar)	Bond Issue #7	\$1,528,874			\$1,528,874										
6	Newport Section 7, PR4, PR5 Developer Reim. (Lennar)	Prop. Bond Issue 8	\$1,262,309						\$1,262,309							
7	Newport Sec 8, PR 3 & 4 Clearing & Grubbing Dev. Reim. (Lennar)	Bond Issue #6	\$39,588			\$39,588										
8	Newport Section 8, Partial Replat 3, Dev. Reim. (Lennar)	Bond Issue #6	\$322,630			\$322,630										
9	Newport Section 8, Partial Replat 4, Dev. Reim.(Lennar)	Bond Issue #6	\$1,016,250			\$1,016,250										
10	Newport Section 9, Dev. Reim, (Rochester)	Bond Issue #6	\$962,578			\$962,578										
11	Newport Section 10, Partial Replat 1 Dev. Reim. (Rochester)	Prop. Bond Issue 8	\$546,612						\$546,612							
12	Newport Sec 4, Reserve C (Area 7), 3.42 Acres		\$0													
13	Newport Sec 4, Reserve D (Area 8), 12.35 Acres	NPBOD will not offer any future developer reimbursement. No Exist. Developer Agmt. Therefore est.	\$0													
14	Country Club Villas of NP (Area 12), 8.28 Acres		\$0													
15	Country Club Villas of NP (Area 13), 2.12 Acres, 1.13 ac Dev		\$0													
16	HOA Country Club Tr (Area 16) 3.04 Acres		\$0													

Item	Status	Amount	\$5,500,000	\$4,225,000	\$7,500,000	\$20,840,000	Projected Year when Funds will be needed									
			Bond Issue #4	Bond Issue #5	Bond Issue #6	Actual Bond Issue #7	Bond Issue 8									
			2016	2018	2019	2021/2022	2022	2023	2024	2025	2026	2027	2028	2029	2030	
17 Crosby Development Reserve A (Area 20), 4.87 Acres	amt. removed from CIP.	\$0														
18 Newport Villages (Area 21) 15.31 Acres - Rampart		\$0														
19 187.7-acre Compass Tract (in Defined Area) - Dev. Reimb.	In Defined Area	\$0														
DEVELOPER CONTRIBUTION ITEMS TOTALS		\$7,737,395	\$0	\$0	\$3,849,004	\$1,859,471	\$0	\$1,808,921	\$220,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contingencies																
1 Contingencies (10% of District Construction Costs)					\$218,000	\$1,294,000	\$0	\$655,000	\$311,200	\$1,110,000	\$1,892,000	\$2,318,500	\$221,000	\$225,000	\$652,000	
Contingencies Total			\$0	\$0	\$218,000	\$1,294,000	\$0	\$655,000	\$311,200	\$1,110,000	\$1,892,000	\$2,318,500	\$221,000	\$225,000	\$652,000	
Engineering																
1 Developer Engineering						\$476,560		\$640,284								
2 Engineering & Surveying (22% of Construction Costs)					\$479,600	\$2,846,800	\$0	\$1,441,000	\$684,640	\$2,442,000	\$4,162,400	\$5,100,700	\$486,200	\$495,000	\$1,434,400	
Engineering Total		\$0	\$0	\$0	\$479,600	\$2,846,800	\$0	\$2,081,284	\$684,640	\$2,442,000	\$4,162,400	\$5,100,700	\$486,200	\$495,000	\$1,434,400	
CONSTRUCTION COSTS			\$445,000	\$1,142,900	\$6,726,604	\$18,940,271	\$0	\$11,095,205	\$4,327,840	\$14,652,000	\$24,974,400	\$30,604,200	\$2,917,200	\$2,970,000	\$8,606,400	
IUOE Funds (\$4,500,000)	\$4,300,000 Available															
Insurance and FEMA Reimbursement Funds	\$2,173,911 Available															
NON-CONSTRUCTION COSTS (Normally 15 % of Total BIR)	15.0%		\$0	\$0	\$773,396	\$1,899,730	\$0	\$1,334,795	\$763,736	\$2,585,647	\$4,407,247	\$5,400,741	\$514,800	\$524,118	\$1,518,776	
TOTAL BOND ISSUE AMOUNT			\$445,000	\$1,142,900	\$7,500,000	\$20,840,000	\$0	\$12,430,000	\$5,091,576	\$17,237,647	\$29,381,647	\$36,004,941	\$3,432,000	\$3,494,118	\$10,125,176	
WSD Bond Capacity																
Previous WSD Bond Capacity					\$15,590,000	\$8,090,000	\$40,210,000	\$40,210,000	\$27,780,000	\$22,688,423	\$5,450,776	-\$23,930,871	-\$59,935,812	-\$63,367,812	-\$66,861,930	
2020 Bond Authorization Amount					\$0	\$52,960,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Proposed Bond Issues during the year					\$7,500,000	\$20,840,000	\$0	\$12,430,000	\$5,091,576	\$17,237,647	\$29,381,647	\$36,004,941	\$3,432,000	\$3,494,118	\$10,125,176	
Remaining WSD Bond Capacity Balance					\$8,090,000	\$40,210,000	\$40,210,000	\$27,780,000	\$22,688,423	\$5,450,776	-\$23,930,871	-\$59,935,812	-\$63,367,812	-\$66,861,930	-\$76,987,106	
Inflation Adjustments																
Annual Inflation Values									3.0%	3.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
ANNUAL BIR INFLATION VALUES (3% per year from 2024-2026 and 2% per year from 2027-2030)									\$5,401,653	\$18,836,042	\$34,693,188	\$43,364,101	\$4,216,146	\$4,378,306	\$12,941,105	
WSD Bond Capacity (with Inflation)																
Previous WSD Bond Capacity					\$15,590,000	\$8,090,000	\$40,210,000	\$40,210,000	\$27,780,000	\$22,378,346	\$3,542,304	-\$31,150,884	-\$74,514,985	-\$78,731,131	-\$83,109,437	
2020 Bond Authorization Amount					\$0	\$52,960,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Proposed Bond Issues during the year					\$7,500,000	\$20,840,000	\$0	\$12,430,000	\$5,401,653	\$18,836,042	\$34,693,188	\$43,364,101	\$4,216,146	\$4,378,306	\$12,941,105	
Remaining WSD Bond Capacity Balance					\$8,090,000	\$40,210,000	\$40,210,000	\$27,780,000	\$22,378,346	\$3,542,304	-\$31,150,884	-\$74,514,985	-\$78,731,131	-\$83,109,437	-\$96,050,542	

Newport MUD																			
Water Distribution System - Inspection, Evaluation and Rehabilitation																			
As of 12/15/22																			
No.	Subdivision	Status	Year	Pipe	Rehab	Bond Authorization Prior to 2020			Bond Funds from May 2020 Bond Election					Year Anticipated					
						Bond Issue #4	Bond Issue #5	Bond Issue #6	Bond Issue #7	Bond Issue #8									
						\$5.5M	\$4.225M	\$7.5M	\$20.84M	Proposed	2020	2021	2022	2023	2024	2025	2026	2027	2028
1	Country Club Villas of Newport Section 1 & 2		1982			\$0													
2	Deerpointe Section 1		1978	AC		\$0													
3	Newport Country Club Estates Section 1		1979	AC		\$0													
4	Newport Country Club Golf Club		1972	AC		\$0													
5	Newport Court (Defined Area)		2016	PVC		\$0													
6	Newport Section 1	\$600,000 of BI7 Funds Reallocated to SDH Utility Reloc	1972	AC	\$2,680,000							\$550,000		\$510,000	\$510,000		\$510,000		\$600,000
7	Newport Section 2		1972	AC	\$0														
8	Newport Section 3	Adjustment due to increased construction costs	1972	AC	\$1,520,000								\$460,000	\$490,000			\$570,000		
9	Newport Section 4	Adjustment due to increased construction costs	1972	AC	\$890,000														\$890,000
10	Newport Section 4, Partial Replat 1		2016	PVC	\$0														
11	Newport Section 4, PR 4 (DH Builders)		2017	PVC	\$0														
12	Newport Section 5	Adjustment due to increased construction costs, Additional needs identified.	1972	AC	\$1,440,000								\$530,000	\$370,000	\$540,000				
13	Newport Section 6	Adjustment due to increased construction costs	1972	AC	\$900,000												\$530,000	\$370,000	
14	Newport Section 6, Partial Replat 1		2019	PVC	\$0														
15	Newport Section 7		1972	AC	\$0														
16	Newport Sec 7, Partial Replat No. 1		2018	PVC	\$0														
17	Newport Sec 7, Partial Replat No. 3		2019	PVC	\$0														
18	Newport Sec 7, Partial Replat No. 4		2019	PVC	\$0														
19	Newport Sec 7, Partial Replat No. 5		2020	PVC	\$0														
20	Newport Section 8	Adjustment due to increased construction costs	1978	AC	\$570,000														\$570,000
21	Newport Section 8, Partial Replat 1		2015	PVC	\$0														
22	Newport Section 8, Partial Replat 3		2018	PVC	\$0														
23	Newport Section 8, Partial Replat 4		2017	PVC	\$0														
24	Newport Section 9		2017	PVC	\$0														
25	Newport Section 10		1974	AC	\$0														
26	Newport Section 10, Partial Replat 1		2019	PVC	\$0														
27	Newport Section 11 (portion of Section 6 Res B)		2006 & 2010		\$0														
28	Newport Section 12 (Newport Villas)		2016	PVC	\$0														
29	Oaks at Newport Section 1		1981		\$0														
30	Patio Woods		1975	AC	\$0														
31	Seven Oaks North		2010	PVC	\$0														
32	Seven Oaks South		2014	PVC	\$0														
33	Union of Operating Engineers Training Fac.		2019	PVC	\$0														
34	Villas at Newport		2014	PVC	\$0														
35	Water Meter Replacement Program	Est. 20 year battery life	2018		\$1,500,000														
36	S. Diamondhead Utility Relocation (Water)	Construction Start 2023	2023							\$970,000									
37	Valve Survey and Replacement Program (Replace approximately 50 valves per year)	\$120,000 of BI7 Funds Reallocated to SDH Utility Reloc								\$0	\$0	\$0	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
Water Distribution Projects Total						\$0	\$0	\$0	\$0	\$970,000	\$0	\$550,000	\$1,240,000	\$1,620,000	\$1,300,000	\$1,350,000	\$1,130,000	\$1,140,000	\$1,420,000
Total Bond Issue Requirement (1)										\$1,506,353	\$0	\$854,118	\$1,925,647	\$2,515,765	\$2,018,824	\$2,096,471	\$1,754,824	\$1,770,353	\$2,205,176

Newport MUD										*All TV Costs from BI 4-6*			Bond Funds from May 2020 Bond Election					Year Anticipated								
Sanitary Sewer System - Inspection, Evaluation and Rehabilitation										Bond Authorization Prior to 2020																
As of 8/16/23										\$50,000	\$1,142,900	\$615,433														
										Bond	Bond	Bond														
										Issue #4	Issue #5	Issue #6														
										\$5.5M	\$4.225M	\$7.5M														
										Issue #7	Issue #8						Assuming 1 Line Rehab and 1 MH Rehab per Year									
										\$20.84M	Proposed															
No.	Subdivision	Status	Platted	Pipe	High Wet Weather	Expansive	TV & Inspection	Line Rehab	Manhole Rehab Cost	2016	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
1	Country Club Villas of Newport Section 1 & 2 Country Club Villas of Newport Section 1 & 2 MHs	100% TV 100% TV	1982	Truss & Conc			\$20,000	\$23,225				\$20,000														
									\$11,365																\$12,000	
2	Deerpointe Section 1 Deerpointe Section 1 MHs	100% TV 100% TV	1978	Truss & Conc			\$10,000	\$56,493				\$10,000														
									\$10,742																	\$11,000
3	Newport Country Club Estates Section 1 Newport Country Club Estates Section 1 MHs	100% TV 100% TV	1979	Truss			\$10,000	\$81,940				\$10,000														
									\$7,161																	\$8,000
4	Newport Country Club Golf Club Newport Country Club Golf Club MHs	100% TV 100% TV	1972	Concrete			\$10,000	\$95,349				\$10,000														
									\$5,013																	\$5,000
5	Newport Court (Defined Area)		2016	PVC																						
6	Newport Section 1 Newport Section 1 MHs	100% TV; 9% rehabilitated 100% TV	1972	Concrete	Y	Y	\$120,000	\$2,094,353				\$231,509	\$120,000	\$50,000		\$362,250	\$200,000									
									\$507,194			\$10,804				\$200,000	\$140,000	\$60,000	\$50,000	\$25,000						\$33,000
7	Newport Section 2 Newport Section 2 MHs	100% TV; 6% rehabilitated 100% TV	1972	Truss & Conc			\$160,000	\$1,576,776				\$95,659	\$160,000	\$4,000		\$301,500	\$100,000									
									\$222,640			\$96,613	\$60,000	\$12,000		\$107,500	\$60,000	\$65,000			\$25,000	\$35,000	\$38,000			
8	Newport Section 3 Newport Section 3 MHs	100% TV; 4% rehabilitated 100% TV	1972	Truss & Conc	Y	Y	\$60,000	\$895,292				\$60,000		\$12,000		\$107,500						\$50,000	\$25,000			\$28,000
									\$102,298																	
9	Newport Section 4 Newport Section 4 MHs	100% TV 100% TV	1972	Concrete			\$70,000	\$988,557				\$70,000		\$4,000		\$103,750										
									\$162,360								\$75,000				\$25,000	\$30,000	\$33,000			
10	Newport Section 4, Partial Replat 1		2016	PVC																						
11	Newport Section 4, PR 4 (DH Builders)		2017	PVC																						
12	Newport Section 5 Newport Section 5 MHs	100% TV 100% TV	1972	Concrete	Y	Y	\$40,000	\$538,259				\$40,000														
									\$82,526																	\$40,000
13	Newport Section 6 Newport Section 6 MHs	100% TV; 30% rehabilitated 100% TV	1972	Truss & Conc	Y	Y	\$80,669	\$1,123,962				\$266,461	\$80,669	\$400,000		\$297,500	\$350,000									\$43,000
									\$266,200							\$90,000	\$20,000	\$60,000	\$50,000	\$25,000						\$21,000
14	Newport Section 6, Partial Replat 1		2019	PVC																						
15	Newport Section 7 Newport Section 7 MHs	100% TV 100% TV	1972	Truss			\$50,000	\$461,898				\$50,000														
									\$81,675												\$25,000	\$25,000				\$32,000
16	Newport Sec 7, Partial Replat No. 1		2018	PVC																						
17	Newport Sec 7, Partial Replat No. 3		2019	PVC																						
18	Newport Sec 7, Partial Replat No. 4		2019	PVC																						
19	Newport Sec 7, Partial Replat No. 5		2020	PVC																						
20	Newport Section 8 Newport Section 8 MHs	100% TV; 2% rehabilitated 100% TV	1978	Truss			\$50,000	\$436,526				\$16,286	\$50,000													
									\$98,228			\$23,528										\$25,000	\$20,000	\$33,000		
21	Newport Section 8, Partial Replat 1		2015	PVC																						
22	Newport Section 8, Partial Replat 3		2018	PVC																						
23	Newport Section 8, Partial Replat 4		2017	PVC																						
24	Newport Section 9		2017	PVC																						
25	Newport Section 10 Newport Section 10 MHs	100% TV; 36% rehabilitated 100% TV	1974	Truss & Conc			\$50,000	\$768,414				\$189,729	\$50,000	\$280,000		\$427,500										
									\$166,199			\$49,563				\$50,000					\$50,000	\$25,000	\$20,000	\$21,000		
26	Newport Section 10, Partial Replat 1		2019	PVC																						
27	Newport Section 11 (portion of Section 6 Res B)		2006 & 2010																							
28	Newport Section 12 (Newport Villas)		2016	PVC																						
29	Oaks at Newport Section 1 Oaks at Newport Section 1 MHs	100% TV; 16% rehabilitated 100% TV	1981	Truss			\$10,000	\$29,978				\$10,000														
									\$10,553																	\$11,000
30	Patio Woods Patio Woods MHs	100% TV 100% TV	1975	Truss			\$10,000	\$40,055				\$10,000														
									\$4,774																	\$5,000
31	Seven Oaks North		2010	PVC																						
32	Seven Oaks South		2014	PVC																						
33	Union of Operating Engineers Training Fac.		2019	PVC																						
34	Villas at Newport		2014	PVC																						
35	S. Diamondhead Utility Relocation (Sanitary), \$1,070,000 of SS Rehab BI7 Funds Reallocated to SDH Utility Reloc													\$1,970,000												
36	Sanitary Sewer TV & Rehabilitation	83% TV (100% TV)										\$145,031	\$11,014								\$900,000	\$900,000	\$880,000	\$850,000	\$850,000	\$850,000
	Sanitary Sewer Projects Total	80% TV (100% TV)								\$0	\$1,125,183	\$761,683	\$0	\$2,720,000	\$0	\$2,000,000	\$0	\$950,000	\$1,020,000	\$1,100,000	\$1,080,000	\$1,030,000	\$1,050,000	\$974,000	\$850,000	
	Total Bond Issue Requirement (1)													\$4,224,000	\$0	\$3,105,882	\$0	\$1,475,294	\$1,584,000	\$1,708,235	\$1,677,176	\$1,599,529	\$1,630,588	\$1,512,565	\$1,320,000	
	(1) Total Bond Issue Requirement = Construction Costs + Contingencies+ Engineering + Bond Issuance Costs																									

Newport MUD			Completed																				
Lift Stations			No longer applicable																				
As of 8/16/23			Further investigation																				
Original Prepared by : Kelly Shipley, P.E.																							
Updated by: Abigail Stanhouse, P.E.																							
Surface inspection performed on all lift stations in 2019			When Needed (Year)	Conceptual Cost (2019\$)	Conceptual Cost (2022\$)	LAN Project Number	Status	Bid Amount	Operations Funds	BA Prior to 2020 Bond Issue #6 \$7.5M 2019	Bond Funds from May 2020 Bond Election					Year Anticipated							
										Bond Issue #7 \$20.84M 2020	Bond Issue #8 2021	2022	2023	2024	2025	2026	2027	2028	2029	2030			
No.	Project	Description and Information	Justification	When Needed (Year)	Conceptual Cost (2019\$)	Conceptual Cost (2022\$)	LAN Project Number	Status	Bid Amount	Operations Funds	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
1	Compass Bank Lift Station - 6011-1/2 FM 2100	Wet Well	Constructed in 2014. Minor aggregate showing.	2030	\$20,000	\$40,000		Postponed 2030			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$40,000
2	Compass Bank Lift Station - 6011-1/2 FM 2100	Riser Pipes	Constructed 2014. PVC	2030	\$20,000	\$30,000		Postponed 2030			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000
3	Compass Bank Lift Station - 6011-1/2 FM 2100	Valves/ Yard Piping	Constructed 2014. PVC	2030	\$10,000	\$20,000		Postponed 2030			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,000
4	Compass Bank Lift Station - 6011-1/2 FM 2100	MCC	Constructed 2014.	2036	\$80,000	\$90,000		No work planned			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	Compass Bank Lift Station - 6011-1/2 FM 2100	Misc. - Install fence, reset hatch, site lighting.	Existing PVC fence is not 6' tall, does not have barbed wire, does not have a 16 ft wide access gate. Space within the fencing is limited and if possible be pushed out to provide more maneuverability. Bottom of fence needs repair. Hatch does not close completely, leaving a couple inch gap open for storm water to get in. Add site lighting	2020	\$20,000	\$20,000		Funds Reallocated to SDH Utility Reloc			\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Compass Bank Lift Station Total											\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$90,000
6	Lift Station #1 - 514 Helmsman	Wet Well - Add Liner, Seal I/I	Age (1972)	2024	\$30,000	\$50,000		Postponed 2024			\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	Lift Station #1 - 514 Helmsman	Riser Pipes - Replace	Age (1972)	2024	\$25,000	\$30,000		Postponed 2024			\$0	\$0	\$0	\$0	\$0	\$30,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8	Lift Station #1 - 514 Helmsman	Valves/ Yard Piping - Replace	Exterior pipe is chalking, dry pit pipes have signs of corrosion. Pipe supports need replacement. Valves in good condition, some need recoating.	2024	\$15,000	\$20,000		Postponed 2024			\$0	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9	Lift Station #1 - 514 Helmsman	MCC - Replace and Raise	Move to surface for safer access. Age (1972). Replace Prior to SCADA. Add site lighting.	2021	\$80,000	\$80,000		Coordinating with operator to replace in Q1 2024			\$0	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10	Lift Station #1 - 514 Helmsman	Misc. - Install Access Drive	Site currently does not have an access drive. COH LS design manual (2016), requires an all-weather access drive to lift station such that the ROW is not blocked by a vehicle.	2024	\$16,000	\$16,000		Postponed 2024			\$0	\$0	\$0	\$0	\$0	\$16,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lift Station #1 Total											\$0	\$0	\$80,000	\$0	\$0	\$116,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11	IUOE Lift Station	Wet Well	Constructed 2018	2033	\$0	\$0		No work planned			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12	IUOE Lift Station	Riser Pipes	Constructed 2018	2033	\$0	\$0		No work planned			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	IUOE Lift Station	Valves/ Yard Piping	Constructed 2018	2033	\$0	\$0		No work planned			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14	IUOE Lift Station	MCC	Constructed 2018	2048	\$0	\$0		No work planned			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	IUOE Lift Station	Misc. Items	Constructed 2018	2033	\$0	\$0		No work planned			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
IUOE Lift Station Total											\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	Lift Station #2 - 16062 Dunes Dr.	Wet Well - Add Liner, Seal I/I	Age (1972)	2024	\$30,000	\$50,000		Postponed 2024			\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
17	Lift Station #2 - 16062 Dunes Dr.	Riser Pipes - Replace	Age (1972)	2024	\$25,000	\$30,000		Postponed 2024			\$0	\$0	\$0	\$0	\$0	\$30,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	Lift Station #2 - 16062 Dunes Dr.	Valves/ Yard Piping - Replace	Exterior pipe is chalking, dry pit pipes have signs of corrosion. Valves in good condition, some need recoating.	2024	\$15,000	\$20,000		Postponed 2024			\$0	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
19	Lift Station #2 - 16062 Dunes Dr.	MCC - Replace and Raise	Move to surface for safer access. Age (1972). Replace Prior to SCADA. Add site lighting.	2021	\$80,000	\$80,000		Coordinating with operator to replace in Q1 2024			\$0	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
20	Lift Station #2 - 16062 Dunes Dr.	Misc. - Install Access Drive	Site currently does not have a driveway from ROW. Appears to have a crushed stone access. COH LS design manual (2016), requires an all-weather access drive to lift station such that the ROW is not blocked by a vehicle.	2024	\$16,000	\$16,000		Postponed 2024			\$0	\$0	\$0	\$0	\$0	\$16,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lift Station #2 Total											\$0	\$0	\$80,000	\$0	\$0	\$116,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21	Lift Station #3 - 1212 S. Diamondhead Blvd	Wet Well - Add Liner, Seal I/I	Age (1972)	2038	\$60,000	\$0		Being replaced in SDH Utility Reloc			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
22	Lift Station #3 - 1212 S. Diamondhead Blvd	Riser Pipes - Replace	Signs of corrosion	2038	\$25,000	\$0		Being replaced in SDH Utility Reloc			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
23	Lift Station #3 - 1212 S. Diamondhead Blvd	Valves/ Yard Piping - Replace	Pipes and valves have signs of corrosion, valve vault is brick with no working space. Move to surface and fill vault.	2038	\$20,000	\$0		Being replaced in SDH Utility Reloc			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
24	Lift Station #3 - 1212 S. Diamondhead Blvd	MCC	Replaced in 2018	2053	\$0	\$0		Being replaced in SDH Utility Reloc			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
25	Lift Station #3 - 1212 S. Diamondhead Blvd	Misc. - Install Fence	Existing fence is not min. 6' tall, does not encompass the valve vault. Add site lighting.	2038	\$20,000	\$0		Being replaced in SDH Utility Reloc			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lift Station #3 Total											\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
26	Lift Station #4 - 931 Flying Bridge Way	Wet Well - Reline, Seal I/I	Coal tar liner is showing signs of deterioration.	2025	\$30,000	\$50,000		Postponed 2025			\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0
27	Lift Station #4 - 931 Flying Bridge Way	Riser Pipes - Replace	Signs of corrosion	2025	\$25,000	\$30,000		Postponed 2025			\$0	\$0	\$0	\$0	\$0	\$0	\$30,000	\$0	\$0	\$0	\$0	\$0	\$0
28	Lift Station #4 - 931 Flying Bridge Way	Valves/ Yard Piping - Replace	Exterior pipe is chalking.	2025	\$15,000	\$20,000		Postponed 2025			\$0	\$0	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0
29	Lift Station #4 - 931 Flying Bridge Way	MCC - Replace	Experiencing ongoing electrical issues with the service from the main. Age (1978). Replace prior to SCADA. Provide more site lighting	2020	\$80,000	\$80,000		Funds Reallocated to SDH Utility Reloc			\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
30	Lift Station #4 - 931 Flying Bridge Way	Misc. - Install Fence	Minor rust, fencing is close to electrical pole and if possible be pushed out to provide more maneuverability.	2020	\$10,000	\$10,000		Funds Reallocated to SDH Utility Reloc			\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lift Station #4 Total											\$90,000	\$0	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0
31	Lift Station #5 - 1310-1/2 Stem Way	Wet Well - Add Liner, Seal I/I	Age (1974). Minor deficiencies observed.	2026	\$30,000	\$50,000					\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0

Newport MUD			Completed																			
Lift Stations			No longer applicable																			
As of 8/16/23			Further investigation																			
Original Prepared by : Kelly Shipley, P.E.																						
Updated by: Abigail Stanhouse, P.E.																						
Surface inspection performed on all lift stations in 2019			When Needed	Conceptual Cost (2019S)	Conceptual Cost (2022S)	LAN Project Number	Status	Bid Amount	Operations Funds	BA Prior to 2020 Bond Issue #6 \$7.5M	Bond Funds from May 2020 Bond Election					Year Anticipated						
No.	Project	Description and Information	Justification	When Needed (Year)	Conceptual Cost (2019S)	Conceptual Cost (2022S)	LAN Project Number	Status	Bid Amount	Operations Funds	Bond Issue #6 2019	Bond Issue #7 2020	Bond Issue #8 2021	Bond Issue #9 2022	Bond Issue #10 2023	Bond Issue #11 2024	Bond Issue #12 2025	2026	2027	2028	2029	2030
32	Lift Station #5 - 1310-1/2 Stem Way	Riser Pipes - Replace	Signs of corrosion	2026	\$25,000	\$30,000					\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000	\$0	\$0	\$0	\$0
33	Lift Station #5 - 1310-1/2 Stem Way	Valves/ Yard Piping - Replace	Signs of corrosion	2026	\$15,000	\$20,000					\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0
34	Lift Station #5 - 1310-1/2 Stem Way	MCC - Replace	Age (1974). Replace Prior to SCADA. Provide more site lighting	2021	\$80,000	\$80,000		Coordinating with operator to replace in Q1 2024			\$0	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
35	Lift Station #5 - 1310-1/2 Stem Way	Misc. - Install Fence	Existing wooden fence is not 8' tall, does not have barbed wire, does not have a 16 ft wide access gate. Poor condition. Space within the fencing is limited and if possible relocate fence to provide more maneuverability.	2021	\$10,000	\$10,000		Coordinating with operator to replace in Q1 2024			\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Lift Station #5 Total											\$0	\$0	\$90,000	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0
36	Lift Station #6 - 818 Handspike Way	Wet Well - Add Liner	Minor aggregate showing from aboveground inspection. Age (1977)	2024	\$30,000	\$50,000		Postponed 2024			\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0
37	Lift Station #6 - 818 Handspike Way	Riser Pipes - Replace	Age (1977)	2024	\$25,000	\$30,000		Postponed 2024			\$0	\$0	\$0	\$0	\$0	\$30,000	\$0	\$0	\$0	\$0	\$0	\$0
38	Lift Station #6 - 818 Handspike Way	Valves/ Yard Piping - Replace	Exterior pipe is chalking, dry pit pipes have signs of corrosion. Valves in good condition, some need recoating.	2024	\$15,000	\$20,000		Postponed 2024			\$0	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0
39	Lift Station #6 - 818 Handspike Way	MCC - Replace	Move to surface for safer access. Age (1977). Replace Prior to SCADA. Add site lighting.	2021	\$80,000	\$80,000		Completed			\$0	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
40	Lift Station #6 - 818 Handspike Way	Misc. - Install Access Drive and Fence	Site currently does not have an access drive. COH LS design manual (2016), requires an all-weather access drive to lift station such that the ROW is not blocked by a vehicle. Existing fence is not min. 6' tall. Add Odor Control.	2024	\$20,000	\$20,000		Postponed 2024			\$0	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0
Lift Station #6 Total											\$0	\$0	\$80,000	\$0	\$0	\$120,000	\$0	\$0	\$0	\$0	\$0	\$0
41	Lift Station #7 - 15727 Via Dora	Wet Well - Add Liner, Seal I/I	Age (1978). Radial crack around the exterior of the wet well. Walls look good, joints have cracks nearby.	2027	\$30,000	\$50,000		Postponed 2027			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0
42	Lift Station #7 - 15727 Via Dora	Riser Pipes - Replace	Signs of corrosion	2027	\$25,000	\$30,000		Postponed 2027			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000	\$0	\$0	\$0
43	Lift Station #7 - 15727 Via Dora	Valves/ Yard Piping - Recoat	Coating is chalky. Concrete pipe support is cracked, needs replacement.	2027	\$15,000	\$20,000		Postponed 2027			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0
44	Lift Station #7 - 15727 Via Dora	MCC - Replace	Age (1978). Add site lighting. Rotate generator hook up for easier access.	2027	\$80,000	\$150,000		Postponed 2027			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000	\$0	\$0	\$0
45	Lift Station #7 - 15727 Via Dora	Misc. - Replace stairs, handrails, and fencing	Bolt securing stairs is exposed and corroded. Handrails have come apart in places. Existing fence is not min. 6' tall. Has rust.	2027	\$15,000	\$15,000		Postponed 2027			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000	\$0	\$0	\$0
Lift Station #7 Total											\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$265,000	\$0	\$0	\$0
46	Seven Oaks Lift Station - 16146-1/2 Golf Club Dr	Wet Well	Constructed 2006, reline wet well	2029	\$30,000	\$50,000		Postponed 2029			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0
47	Seven Oaks Lift Station - 16146-1/2 Golf Club Dr	Riser Pipes	Constructed 2006, recoat piping	2029	\$15,000	\$15,000		Postponed 2029			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000	\$0
48	Seven Oaks Lift Station - 16146-1/2 Golf Club Dr	Valves/ Yard Piping	Constructed 2006, recoat piping	2029	\$15,000	\$15,000		Postponed 2029			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000	\$0
49	Seven Oaks Lift Station - 16146-1/2 Golf Club Dr	MCC	Constructed 2006	2036	\$0	\$0		No work planned			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
50	Seven Oaks Lift Station - 16146-1/2 Golf Club Dr	Misc. Items	Constructed 2006	2029	\$0	\$0		No work planned			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Seven Oaks Lift Station Total											\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80,000	\$0
Lift Station Projects Total					\$1,517,000						\$110,000	\$0	\$330,000	\$0	\$0	\$352,000	\$100,000	\$100,000	\$265,000	\$0	\$80,000	\$90,000
Total Bond Issue Requirement (1)													\$512,471	\$0	\$0	\$546,635	\$155,294	\$155,294	\$411,529	\$0	\$124,235	\$139,765
(1) Total Bond Issue Requirement = Construction Costs + Contingencies+ Engineering + Bond Issuance Costs																						

Newport MUD		1.0 MGD WWTP constructed in 1972		Completed																						
Wastewater Treatment Plant		0.3 MGD Expansion in 2008, 1.3 MGD Total		No longer applicable																						
As of 2/14/22		Currently permitted for 1.3 MGD		Desired but not required for plant function																						
Original Prepared by: Adam Anderson, P.E.				Further Investigation																						
Revised by: A Stanhouse, P.E.																										
No.	Project	Description of Problem & Information	Justification	When Needed (years)	Conceptual Cost (2019\$)	Low Range (2022\$)	High Range (2022\$)	LAN Project Number	Status	Bid Amount	Operations Funds	Bond Authorization Prior to 2020			Bond Funds from May 2020 Bond Election					Year Anticipated						
												Bond Issue #4	Bond Issue #5	Bond Issue #6	Bond Issue #7	Bond Issue #8	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
8	Add a Blower system for the Chlorine System	Disconnect the air line from the main plant aeration system and construct separate blower to provide the required air.	A dedicated blower will simplify aeration control. A small blower can be used to supply this air to the clarifier.		\$200,000				Blower system for Chlorine will be included in WWTP Expansion Phase 2.																	
9	Blower Modifications for Aeration and Digester Basins	Add sensors, motor actuated valves, and a new blower controlled by a VFD to add air to the system, as needed.	Improve operational efficiency. The system needs DO and/or ORP sensors connected to motor actuated valves for the air system in the basins to control air flow in each basin. The sensors will be connected to a PLC to read the measurements and send data to a VFD connected to a new blower to help regulate the amount of air.		\$1,200,000				Intended to be addressed through other improvements included in WWTP expansion.																	
10	Chlorine Rapid- Mix System	TCEQ requirements	The existing system met the TCEQ requirements at the time of design and construction but does not meet the current requirements. Refer to TCEQ §217.281(a)(2) "Chlorine and Sodium Hypochlorite Application. A disinfection system must apply the chlorine gas or solution in a highly turbulent flow regime created by in-line diffusers, mechanical mixers, or jet mixers. Effective initial mixing for the mean velocity gradient (G value) in the area of turbulent flow must exceed 500 per second."		\$320,000				Included in WWTP Expansion Phase 2 with disinfection improvements.																	
11	RAS/WAS system	TCEQ requirements	The existing system met the TCEQ requirements at the time of design and construction but does not meet the current requirements. Refer to TCEQ §217.158(a)(2) "A monitoring and control system must provide a means to control return and waste sludge flows from each clarifier, to control return sludge flows into each aeration basin, to meter return sludge flows, and to measure waste sludge flows. The present system using air lift pumps cannot be metered or adequately controlled to meet these requirements. In addition, air pumping is one of the most expensive ways to pump fluids		\$350,000				Replacement of air lift pumps with self-priming pumps is included in WWTP Expansion Phase 1.																	
12	Screw Dewater System		Improves operational efficiency. District may be able to reduce dewatering costs.		\$750,000				Review cost/benefit ratio.																\$750,000	
Wastewater Treatment Plant Projects Total							\$46,425,000					\$395,000	\$109,757	\$819,583		\$0	\$500,000	\$0	\$0	\$0	\$7,200,000	\$16,500,000	\$17,840,000	\$0	\$0	\$3,450,000
Total Bond Issue Requirement (1)																\$0	\$776,471	\$0	\$0	\$0	\$11,181,176	\$25,623,529	\$27,704,471	\$0	\$0	\$5,357,647

(1) Total Bond Issue Requirement = Construction Costs + Contingencies+ Engineering + Bond Issuance Costs

Newport MUD					Completed																												
Surface Water Treatment Plant					No longer applicable																												
As of 2/14/22					Desired but not required for plant function																												
Prepared by : Luis Sanabria, P.E.					Low	High																											
Revised by : A Stanhouse, P.E.					Conceptual	Range	Range																										
				When	Conceptual	Range	Range	LAN																									
				Needed	Cost	Cost	Cost	Project																									
No.	Project	Description of Problem, Project and Information	Justification	(years)	(2019S)	(2022S)	(2022S)	Number	Project Status	Amount	2020	Bond Issue #4	Bond Issue #5	Bond Issue #6	Surplus	Funds	Needed	Bond Issue #7	Bond Issue #8	Bond Issue #8	Year Anticipated	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Projects required to prevent Imminent Failure																																	
1	Rehabilitate Tonka Clarifier	It is believed that the Scraper Arm is out of alignment and is rubbing holes in the center column near bottom of the clarifier. A portion of the aeration feed to the clarifier is not passing through the center well and is not being properly clarified.	Need to repair before the scraper arms becomes lodged and stops operating	ASAP	\$100,000			12195	Completed 5/21/20	\$24,955	\$24,995																						
2	Replace Existing Hydro Tank	The 20,000 gallon hydro-tank has only ~20% of its interior coating remaining and some metal has corroded. After the design began, the compressor was found to be at the end of its useful life and the controls were inoperable. Both were replaced.	Improved safety and operation	ASAP	\$70,000			12194	Completed 9/1/20	\$163,500		\$50,000	\$45,000																				
3	Elevated Storage Tank Interior & Exterior Recoating	600,000 gallon, composite tank. Exterior and interior recoating required.	The EST was coated in 2006. It should be recoated every 8-10 years or 2014-2016.	1	\$425,000			12197	Completed 8/20/20	\$351,500			\$425,000	\$73,500																			
Projects required for existing plant to meet inspections, permit or regulations																																	
1	Ground Storage Tank Exterior Coating	The existing GST has mold buildup on the exterior of the tank. The Operator tried power washing but the buildup does not come off.			\$120,000																											\$120,000	
Projects required due to projected buildout																																	
1	Expand SWTP from 2.4 to 4 MGD	Will need to expand the SWTP to meet buildout projections and HGSD requirements beginning in 2025. Need to model the Water System to confirm. Hydraulic Modeling is \$40,000. Low range cost is \$4/gpd and high range is \$7/gpd. Projects #1 thru #9 below would be included in this expansion.	Meet buildout projects and HGSD requirements beginning in 2025		\$4,800,000-\$8,400,000	\$4,000,000	\$5,000,000		Project is in design and projected to bid Q4 2023; may require additional \$1M to upgrade raw water pump station depending on state of existing pump station.											\$4,000,000													
2	New Generator	Existing generator is 350 kW and is almost 25 yrs. old. The generator will be under-sized for the future needs (additional onsite 1300 gpm well with 200 Hp motor/pump). Need 700 kW Diesel Generator or 750 kW Natural Gas Generator. This assumes there is an adequate natural gas supply.		5-10	\$800,000-\$900,000	\$900,000			Included in SWTP expansion project.																								
Projects to improve the treatment process and operational efficiencies, if chosen individually from the expansion																																	
1	Treatability Study	This study would evaluate the most efficient mix of filter media and membrane filters to produce the optimum water quality at minimum operational costs	Improve the operational efficiencies		\$250,000				No longer applicable due to Purifics																								
1A	Purifics Filter Pilot Study	This study would evaluate the performance effectiveness and efficiency of the Purifics Filter to the treat/remove Total Organic Carbon (TOC) and Pathogens within the purification process	Improve the operational efficiencies	1	\$15,000- \$25,000			12151	Completed November 2020	\$23,000	\$23,000																						
2	Add Membrane Filters	After determination of treatability study	Improve the operational efficiencies		\$500,000-\$800,000	\$7,038,000	\$7,820,000	12210/12263	PER completed 2/21 and sent to TCEQ for 7/21. Board purchased filters 9/22. Filters included in SWTP expansion project.	\$7,820,000								\$7,820,000															
3	Add Streaming Current/Zeta Potentiometer for coagulant dosage control.	Adding equipment to monitor water quality and allow more accuracy in chemical dosing. Chemical dosing is a function of both water flow rate and water quality.	Improve the operational efficiencies		\$40,000				No longer applicable due to Purifics																								
4	Add online monitoring of pH (D3), Monochloramine, Total Cl2, NTU & Nitrate/Nitrite	Adding equipment to allow online analysis of water quantity and disinfectant concentrations	Improve the operational efficiencies		\$80,000				No longer applicable due to Purifics																								
5	Add online monitoring of pH (D2), Monochloramine, Total Cl2, Free Ammonia	Adding equipment to allow online analysis of water quantity and disinfectant concentrations	Ensures chemical dosing is adequate and prevents overdosing		\$75,000				No longer applicable due to Purifics																								
6	Add Inline Mixers at Clarifiers for Chlorine and Liquid Ammonia Sulphate	Plant does not meet current TAC Ch 290.42e7 regulations to flash mix Chloramines but did meet the regulations in place at the time of design & construction. These changes will be required with a plant expansion. An inline mixer would be added to fully disperse disinfecting chemicals.	Include with SWTP Expansion		\$20,000				No longer applicable due to Purifics																								
7	Change Filter Media from Powder Activated Carbon to Sand and Granular Activated Carbon	The current Powder Activated Carbon Filter Media is very messy to work with	Improve operations		\$200,000				No longer applicable due to Purifics																								
8	Add Pretreatment Basin - to add Chlorine and Aerate the Water	This will be required with a Plant Expansion to meet TAC Ch 290.42 regulations.	Improve the operational efficiencies		\$500,000				No longer applicable due to Purifics																								
9	Add equipment to mix water within the Water Storage Tanks	Pulsed air. Red Valve, Pipeflex, or SolarBee. Will help keep nitrification down when using chloramine. Could potentially remove this project.	Improve water quality		\$350,000		\$350,000		Desired but not required for plant function (PUS 12/22)																								\$350,000
10	Abandon existing Water Plant #2 Water Well and add New Water Well on SWTP site	Water well at WP #2 is not used due to taste & odor issues. A TV inspection shows the well casing is in bad condition. Recommend abandoning and plugging the well at WP#2 and drill new well at SWTP.	A new well is required		\$1,300,000-\$1,500,000	\$1,800,000	\$2,200,000		B17 Funds Reallocated to purchase Purifics Filters. Abandon existing Water Plant #2 Water Well is included in Water Plant Tab																							\$1,800,000	
Surface Water Treatment Plant Projects Total																																	
Total Bond Issue Requirement (1)																																	
(1) Total Bond Issue Requirement = Construction Costs + Contingencies + Engineering + Bond Issuance Costs																																	

Newport MUD				Desired but not required for plant function																																							
Water Plants		Further Investigation																																									
As of 2/14/22																																											
Prepared by : Adam Anderson, P.E.						Low		High																																			
Revised by : A Stanhouse, P.E.						Conceptual		Conceptual		LAN																																	
						When		Cost		Project		Operations		Bond		Bond		Bond		Surplus		Funds		Bond																			
				Needed		Range		Conceptual		Conceptual		Number		Issue #4		Issue #5		Issue #6		Funds		Needed		Issue #7																			
No.		Project		Description of Problem, Project and Information		Justification		(years)		(2019S)		(2022S)		(2022S)		2016		2018		2019		2020		2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
Water Plant No. 1 (Constructed in 1978)																																											
1	Replace the two existing submersible pump motors (combined 1900 gpm) in Water Well 1 with one Vertical Turbine motor and pump	One pump is 60 HP and the other is 75 HP. Every 8 - 10 years the motor & pump need to be rehabbed. At the next pump & motor rehab consider replacing the 2 pumps with a single pump & motor.	Reduce the repair cost in half		\$300,000		\$400,000																															\$400,000					
2	Install an Aeration Tank on Platform	Need to aerate the water to reduce or remove the sulfide levels	To remove sulfide odor in water		\$200,000		\$200,000																\$200,000																				
3	Remove & replace all valves	The site has 30 yr. old valves, which are difficult to operate					\$200,000																																\$200,000				
4	Change the roof pitch and recoat of building	Existing roof is flat and doesn't drain well, possibly change to gable roof			\$50,000		\$50,000																																	\$50,000			
5	Add equipment to mix water within the 500,000 gallon Water Storage Tank	Add mixing equipment to keep consistent water age throughout tank and provide uniform chlorine residual			\$110,000		\$110,000																																\$110,000				
6	Install one isolation valve on distribution pipe inside water plant.	The existing water plant does not have an isolation valve and one is needed for maintenance purposes			\$15,000		\$15,000										\$15,000																										
Water Plant No. 2 (Constructed in 1973)																																											
1	Cap and abandon existing Water Well at Water Plant #2 (1300 gpm).	Well is not used. A TV inspection shows casing in poor condition and water quality is not good. Recommend abandon and cap well.			\$40,000		\$150,000																\$40,000																\$110,000				
Water Plant Projects Total					\$0	\$0	\$0	\$1,125,000						\$0	\$0	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0	\$240,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$710,000	\$0	\$0	\$160,000	
Total Bond Issue Requirement (1)																\$23,294						\$0	\$372,706	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,102,588	\$0	\$0	\$248,471	
(1) Total Bond Issue Requirement = Construction Costs + Contingencies + Engineering + Bond Issuance Costs																																											

Newport MUD														
Detention Ponds														
As of 2/14/22														
	Detention Ponds	Amount	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1	Newport Court - Detention Pond													
2	Newport Section 7 - Detention Pond													
3	Newport Section 8 - Detention Pond													
4	Newport Section 9 - Detention Pond													
5	Newport Section 10, PR1 - Detention Pond													
6	Seven Oaks Detention Pond													
	Detention Pond Projects Total		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Bond Issue Requirement (1)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(1) Total Bond Issue Requirement = Construction Costs + Contingencies+ Engineering + Bond Issuance Costs														

Newport MUD														
Facilities														
As of 2/14/22														
		Bond Issue #7												
	Cost	2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Admin Bldg	\$250,000	\$250,000												
Facilities Total		\$250,000	\$0	\$0	\$0	\$0	\$0	\$0						
Total Bond Issue Requirement (1)		\$388,235	\$0	\$0	\$0	\$0	\$0	\$0						
(1) Total Bond Issue Requirement = Construction Costs + Contingencies+ Engineering + Bond Issuance Costs														