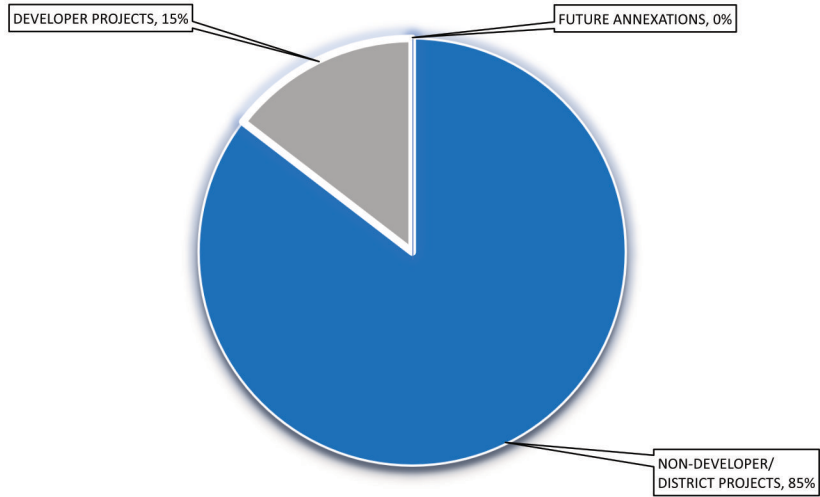
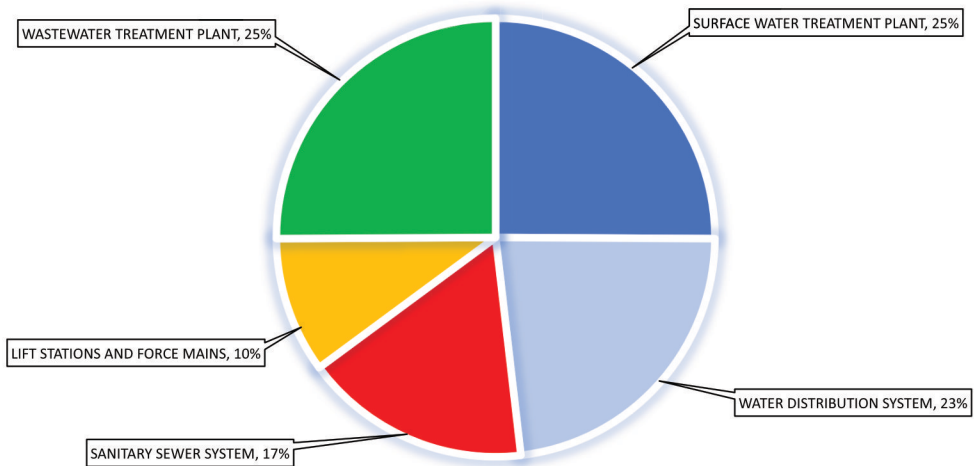


NEWPORT M.U.D. CAPITAL IMPROVEMENT PLAN

DISTRICT VS. DEVELOPER PROJECTS



DISTRICT PROJECT BREAKDOWN



NEWPORT M.U.D. CAPITAL IMPROVEMENT PLAN

Newport MUD - Capital Improvement Plan As of 8/15/19		Projected Year when Funds will be needed											Total Needs	Unfunded	Total Needs	Total Needs	
Item	Amount	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2020 to 2030	Balance in 2020	2020 to 2030	2020 to 2030	Rounded
DEVELOPER CONTRIBUTION ITEMS (Including Dev. Interest)																	
1 Newport Section 4, PR 4 (DH Builders)	\$187,000						\$187,000						\$187,000		\$187,000		
2 Newport Section 6, Partial Replat 1, Dev. Reim. (Rochester)	\$325,000			\$325,000									\$325,000		\$325,000		
3 Newport Section 7, Developer Reimbursement (Lennar)	\$3,500,000			\$3,500,000									\$3,500,000		\$3,500,000		
4 Newport Section 10, Partial Replat 1 Dev. Reim. (Rochester)	\$650,000			\$650,000									\$650,000		\$650,000		
5 Newport Sec 4, Reserve C (Area 7), 3.42 Acres	\$191,483						\$191,483						\$191,483		\$191,483		
6 Newport Sec 4, Reserve D (Area 8), 12.35 Acres	\$713,708						\$713,708						\$713,708		\$713,708		
7 Country Club Villas of NP (Area 12), 8.28 Acres	\$481,608						\$481,608						\$481,608		\$481,608		
8 Country Club Villas of NP (Area 13), 2.12 Acres, 1.13 ac Dev	\$58,025						\$58,025						\$58,025		\$58,025		
9 HOA Country Club Tr (Area 16) 3.04 Acres	\$516,423						\$516,423						\$516,423		\$516,423		
10 Crosby Development Reserve A (Area 20), 4.87 Acres	\$715,738						\$715,738						\$715,738		\$715,738		
11 Newport Villages (Area 21) 15.31 Acres - Rampart	\$1,465,276						\$1,465,276						\$1,465,276		\$1,465,276		
DEVELOPER CONTRIBUTION ITEMS TOTALS	\$8,804,260	\$0	\$0	\$4,475,000	\$0	\$0	\$4,329,260	\$0	\$0	\$0	\$0	\$0	\$8,804,260		\$8,804,260		
DISTRICT ITEMS																	
1 Surface Water Plant		\$2,625,000	\$120,000	\$0	\$0	\$900,000	\$8,400,000	\$0	\$0	\$0	\$0	\$0	\$12,045,000		\$9,420,000		
2 Water Plants		\$240,000	\$0	\$0	\$0	\$0	\$0	\$0	\$300,000	\$0	\$0	\$0	\$540,000		\$300,000		
3 Water Distribution System		\$720,000	\$720,000	\$680,000	\$700,000	\$740,000	\$740,000	\$720,000	\$590,000	\$740,000	\$780,000	\$780,000	\$7,910,000		\$7,190,000		
4 Sanitary Sewer System		\$625,000	\$700,000	\$740,000	\$720,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$6,985,000		\$6,360,000		
5 Lift Station & Force Mains		\$330,000	\$125,000	\$90,000	\$172,000	\$70,000	\$70,000	\$165,000	\$0	\$0	\$0	\$0	\$1,132,000		\$1,132,000		
6 Wastewater Treatment Plant		\$1,925,000	\$0	\$0	\$0	\$0	\$9,500,000	\$310,000	\$0	\$0	\$0	\$0	\$11,735,000		\$9,810,000		
7 Detention Ponds		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0		
8 Administration Building	\$250,000	\$250,000											\$250,000		\$0		
9 Water Line Ext. Phase 1 to serve Compass Tr Defined Area	\$190,000			\$190,000									\$190,000		\$190,000		
10 Water Line Ext. Phase 2 to serve Compass Tr Defined Area	\$270,000					\$270,000							\$270,000		\$270,000		
11 Force Main Phase 1 to serve Compass Tr Defined Area	\$470,000			\$470,000									\$470,000		\$470,000		
12 Force Main Phase 2 to serve Compass Tr Defined Area	\$960,000					\$960,000							\$960,000		\$960,000		
13 Lift Station to serve Compass Tr. Defined Area	\$860,000			\$860,000									\$860,000		\$860,000		
DISTRICT ITEMS TOTAL		\$6,385,000	\$1,870,000	\$3,065,000	\$1,510,000	\$3,642,000	\$19,310,000	\$1,700,000	\$1,655,000	\$1,340,000	\$1,440,000	\$1,430,000	\$43,347,000		\$36,962,000		
Contingencies																	
Contingencies (10% of District Construction Costs)		\$638,500	\$187,000	\$306,500	\$151,000	\$364,200	\$1,931,000	\$170,000	\$165,500	\$134,000	\$144,000	\$143,000	\$4,334,700		\$3,696,200		
Contingencies Total		\$638,500	\$187,000	\$306,500	\$151,000	\$364,200	\$1,931,000	\$170,000	\$165,500	\$134,000	\$144,000	\$143,000	\$4,334,700		\$3,696,200		
Engineering																	
Engineering & Surveying (22% of Construction Costs)		\$1,404,700	\$411,400	\$674,300	\$332,200	\$801,240	\$4,248,200	\$374,000	\$364,100	\$294,800	\$316,800	\$314,600	\$9,536,340		\$8,131,640		
Engineering Total		\$1,404,700	\$411,400	\$674,300	\$332,200	\$801,240	\$4,248,200	\$374,000	\$364,100	\$294,800	\$316,800	\$314,600	\$9,536,340		\$8,131,640		
CONSTRUCTION COSTS		\$8,428,200	\$2,468,400	\$8,520,800	\$1,993,200	\$4,807,440	\$29,818,460	\$2,244,000	\$2,184,600	\$1,768,800	\$1,900,800	\$1,887,600	\$66,022,300	\$1,551,700	\$57,594,100	\$59,145,800	\$59,500,000
NON-CONSTRUCTION COSTS	15.0%	\$1,487,329	\$435,600	\$1,503,671	\$351,741	\$848,372	\$5,262,081	\$396,000	\$385,518	\$312,141	\$335,435	\$333,106	\$11,650,994	\$273,829	\$10,163,665	\$10,437,494	\$10,500,000
TOTAL BOND ISSUE AMOUNT		\$9,915,529	\$2,904,000	\$10,024,471	\$2,344,941	\$5,655,812	\$35,080,541	\$2,640,000	\$2,570,118	\$2,080,941	\$2,236,235	\$2,220,706	\$77,673,294	\$1,825,529	\$67,757,764	\$69,583,294	\$70,000,000
WSD Bond Capacity																	
Previous WSD Bond Capacity		\$8,090,000	-\$1,825,529	\$65,270,471	\$55,246,000	\$52,901,059	\$47,245,247	\$12,164,706	\$9,524,706	\$6,954,589	\$4,873,647						
New Bond Authorization Amount		\$2,636,412	\$70,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					
Proposed Bond Issues during the year		\$9,915,529	\$2,904,000	\$10,024,471	\$2,344,941	\$5,655,812	\$35,080,541	\$2,640,000	\$2,570,118	\$2,080,941	\$2,236,235	\$2,220,706					
Remaining WSD Bond Capacity Balance		-\$1,825,529	\$65,270,471	\$55,246,000	\$52,901,059	\$47,245,247	\$12,164,706	\$9,524,706	\$6,954,589	\$4,873,647	\$4,637,412						

\$416,706



NEWPORT M.U.D. WASTEWATER TREATMENT PLANT & LIFTSTATIONS

PHOTO ①



Problem: Wastewater Treatment Plant (WWTP) facilities flooded.
Solution: Repair damaged facilities & flood proof plant facilities.

WWTP Underwater – Hurricane Harvey, Aug. 2017

PHOTO ②



Problem: Wastewater Treatment Plant (WWTP) facilities flooded.
Solution: Repair damaged facilities & flood proof plant facilities.

WWTP Underwater – Hurricane Harvey, Aug. 2017

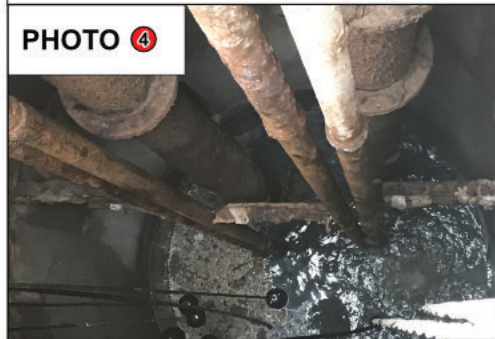
PHOTO ③



Problem: Coal tar liner is showing signs of deterioration and riser piping is corroding.
Solution: Line wet well and replace riser piping.

Lift Station No. 4 (931 Flying Bridge Way)

PHOTO ④



Problem: Severely corroded riser piping with I/I in wet well.
Solution: Replace riser piping & line wet well.

Lift Station No. 3 (1212 S. Diamondhead Blvd)

PHOTO ⑤



Problem: Deteriorated wet well and riser pipes corroding.
Solution: Line wet well and replace riser piping.

Lift Station No. 6 (818 Handspike Way)

PHOTO ⑥



Problem: Deteriorated wet well and riser pipes corroding.
Solution: Line wet well and replace riser piping.

Lift Station No. 1 (514 Helmsman St)

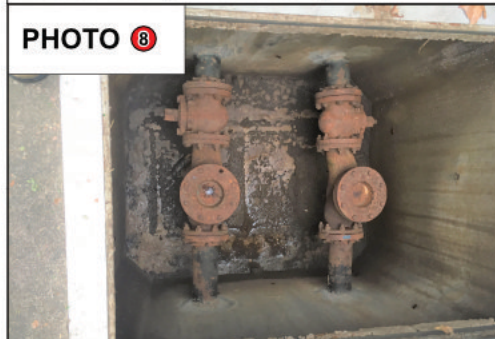
PHOTO ⑦



Problem: Large radial crack around exterior of wet well and major cracking on pipe supports.
Solution: Line wet well and replace pipe supports.

Lift Station No. 7 (15727 Via Dora)

PHOTO ⑧



Problem: Corroded valves and brick vault with limited working space.
Solution: Replace valves and move to surface.

Lift Station No. 5 (1310 1/2 Stem Way Dr)

NEWPORT M.U.D. SANITARY SEWER TV INSPECTION



PHOTO 1
Problem: Broken 24" Reinforced Concrete Pipe at Joint.
Solution: Pipeburst Method.
Newport Section 1

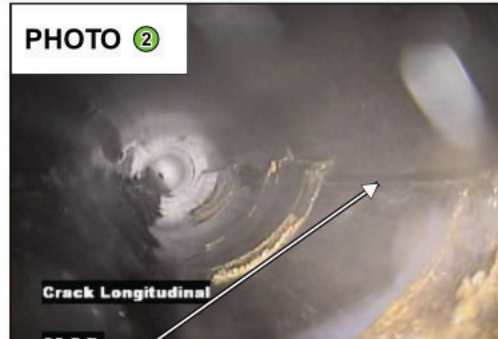


PHOTO 2
Problem: Longitudinal Crack with Signs of Infiltration in 8" Truss Pipe.
Solution: Cured-In-Place Pipe Method.
Newport Section 10

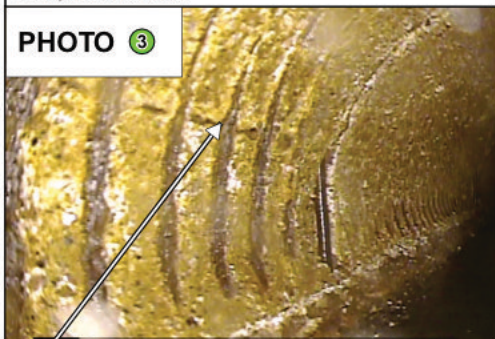


PHOTO 3
Problem: Severe Deterioration of 18" Reinforced Concrete Pipe to the point of reinforcement now exposed.
Solution: Cured-In-Place Pipe or Pipeburst Methods.
Newport Section 6

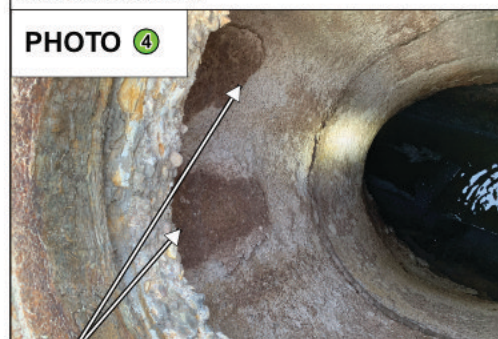


PHOTO 4
Problem: Severe degradation with exposed aggregate and spalling concrete on 48" trunkline manhole.
Solution: Install liner or replace manhole.
Newport Section 10



PHOTO 5
Problem: Longitudinal Crack at top of 12" Truss Pipe.
Solution: Pipeburst Method.
Newport Section 2 and Oaks at Newport Section 1

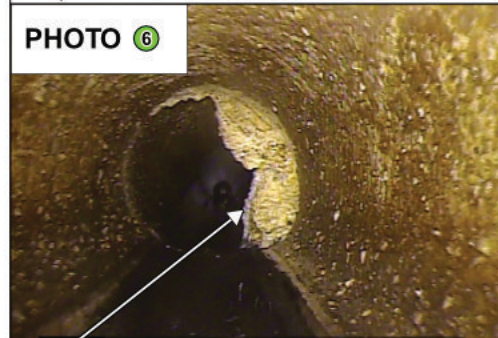


PHOTO 6
Problem: Heavy Deposit buildup at the joint due to Infiltration and Inflow (I/I) over time.
Solution: Pipeburst Method.
Newport Section 1

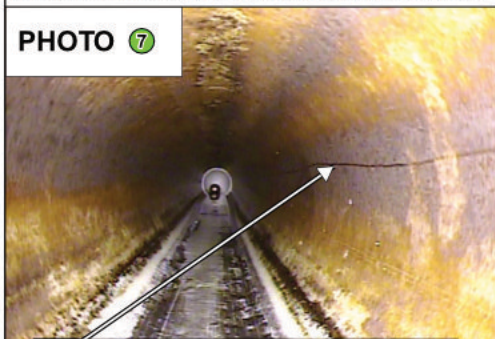


PHOTO 7
Problem: Longitudinal Crack travelling as far as 10 feet in length.
Solution: Pipeburst Method.
Newport Section 1

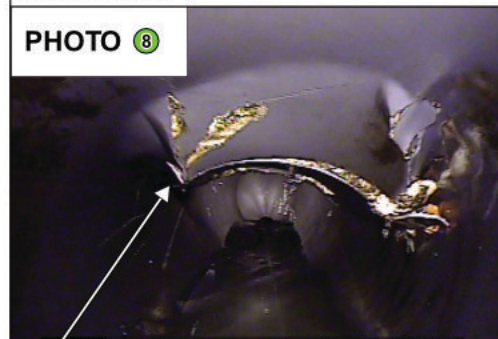


PHOTO 8
Problem: Defective/Intruding Service that is causing buckling and broken pipe.
Solution: Pipeburst Method.
Newport Section 3 and Newport Section 6

NEWPORT M.U.D.

SURFACE WATER TREATMENT PLANT & WATER DISTRIBUTION



PHOTO 1

Surface Water Treatment Plant Problem: Surface Water Treatment Plant will not meet peak flows at ultimate buildout.
Solution: Expand Surface Water Treatment Plant.



PHOTO 2

Surface Water Treatment Plant Clarifier Problem: Tonka Clarifier is not working properly and is now out of service.
Solution: Repair Clarifier before further damage occurs.



PHOTO 3

Hydro Tank Problem: 80% of interior coating has deteriorated over time, and metal is beginning to corrode.
Solution: Replace Hydro Tank due to severity of the conditions.



PHOTO 4

Ground Storage Tank Problem: Ground Storage Tank coating is deteriorating on exterior.
Solution: Recoating of exterior surface.



PHOTO 5

Water Distribution Main Line Problem: Water Main break due to aging distribution line.
Solution: Water System Rehabilitation.



PHOTO 6

Surface Water Treatment Plant Problem: The space and access is limited.
Solution: Improve and maximize space during Plant Expansion.



PHOTO 7

Water Line Valve Problem: Water line valves are aging and need to be evaluated.
Solution: Valve survey and replacement program.

NEWPORT M.U.D. SANITARY SEWER EMERGENCY REPAIRS



Force Main Collapse – Tropical Storm Imelda, Sept. 2019

Problem: Force main collapse near Lift Station No. 6 at 818 Handspike Way.
Solution: Emergency repair of broken force main including temporary pumping.

Emergency Repair Cost: \$158,000

Planned Rehabilitation Cost: \$95,000

Percent Cost Increase for Emergency Repair: 40%



WWTP Sinkhole – Tropical Storm Imelda, Sept. 2019

Problem: Large sinkhole and broken pipes.
Solution: Repair broken pipes by joint repair, backfill sinkhole & stabilize.

Emergency Repair Cost: \$146,000

Planned Rehabilitation Cost: \$88,000

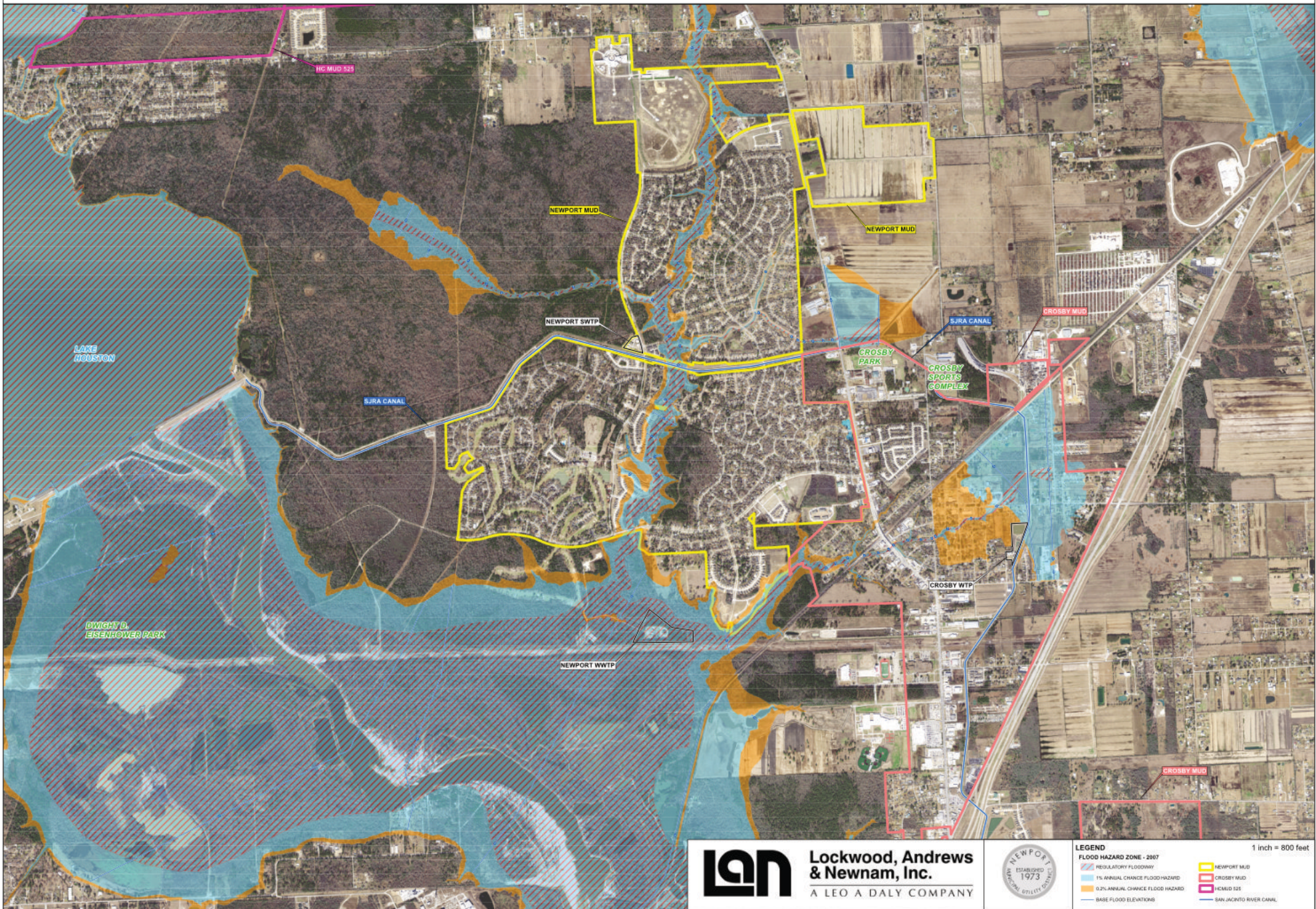
Percent Cost Increase for Emergency Repair: 40%



Lockwood, Andrews
& Newnam, Inc.
A LEO A DALY COMPANY



NEWPORT M.U.D. - FLOOD ZONE MAP



LAN Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY



LEGEND	
	FLOOD HAZARD ZONE - 2807 REGULATORY FLOODWAY
	1% ANNUAL CHANCE FLOOD HAZARD
	0.2% ANNUAL CHANCE FLOOD HAZARD
	BASE FLOOD ELEVATIONS
	NEWPORT MUD
	CROSBY MUD
	HCMUD 525
	SAN JACINTO RIVER CANAL

1 inch = 800 feet