

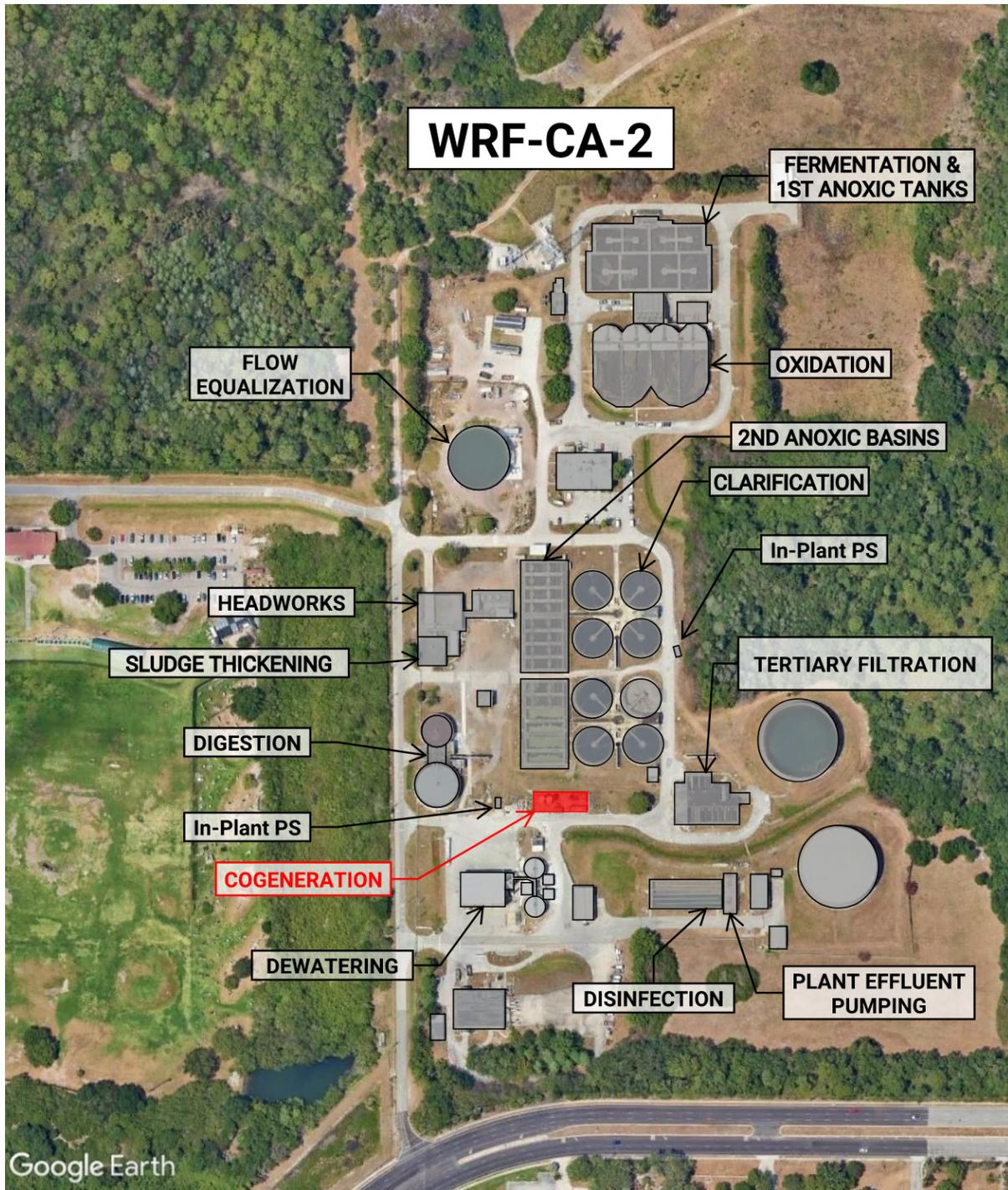
## WRF-CA-1: Dewatering/Solids Handling R&R

<b>Project Duration</b>	2026 – 2030 (5 Years)	
<b>Project Description</b>	<p><b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b></p> <p>Chopper Mixing Pumps (PMP-033, PMP-034), Chopper Mixing Pump Motors (MTR-079, MTR-080), Rotamix Pumps (PMP-031, PMP-032), MCC-13, Sub Pump (PMP-035), Poly Feed Pumps (PMP-043, PMP-044, PMP-045), Poly Feed Pump Motors (MTR-046, MTR-047, MTR-048)</p>	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• PMP-033: 100 HP   4000 GPM</li> <li>• PMP-034: 100 HP   4000 GPM</li> <li>• MTR-079: 5 HP   1750 RPM   460 V   6.6 A</li> <li>• MTR-080: 5 HP   1750 RPM   460 V   6.6 A</li> <li>• PMP-031: N/A</li> <li>• PMP-032: N/A</li> <li>• PMP-035: N/A</li> <li>• PMP-043/NEWRF-CFS-PFB-FP1: 1 HP   1750 RPM   90 V   4.8 A</li> <li>• PMP-044/NEWRF-CFS-PFB-FP2: 0.5 HP   1750 RPM   90 V   4.8 A</li> <li>• PMP-045/NEWRF-CFS-PFB-FP3: 0.5 HP   1750 RPM   90 V   4.8 A</li> <li>• MTR-046/NEWRF-CFS-PFB-FP1-M: 1 HP   1750 RPM   90 V   10 A</li> <li>• MTR-047/NEWRF-CFS-PFB-FP2-M: N/A</li> <li>• MTR-048/NEWRF-CFS-PFB-FP3-M: 0.5 HP   1750 RPM   90 V</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$1,948,600
	Scope Contingency Cost (60%)	\$1,169,200
	Engineering Costs (20%)	\$623,600
	<b>Total Project Cost</b>	<b>\$3,741,400</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>• NORTHEAST ADVANCED POLLUTION CONTROL FACILITY CLEARWATER, FLORIDA, 1992, 92016</li> <li>• NEWRF DEWATERING CENTRIFUGE, 2014, FIM03</li> <li>• NORTHEAST WRF IMPROVEMENTS PROJECT, 2022, 19-0029-UT</li> </ul>	



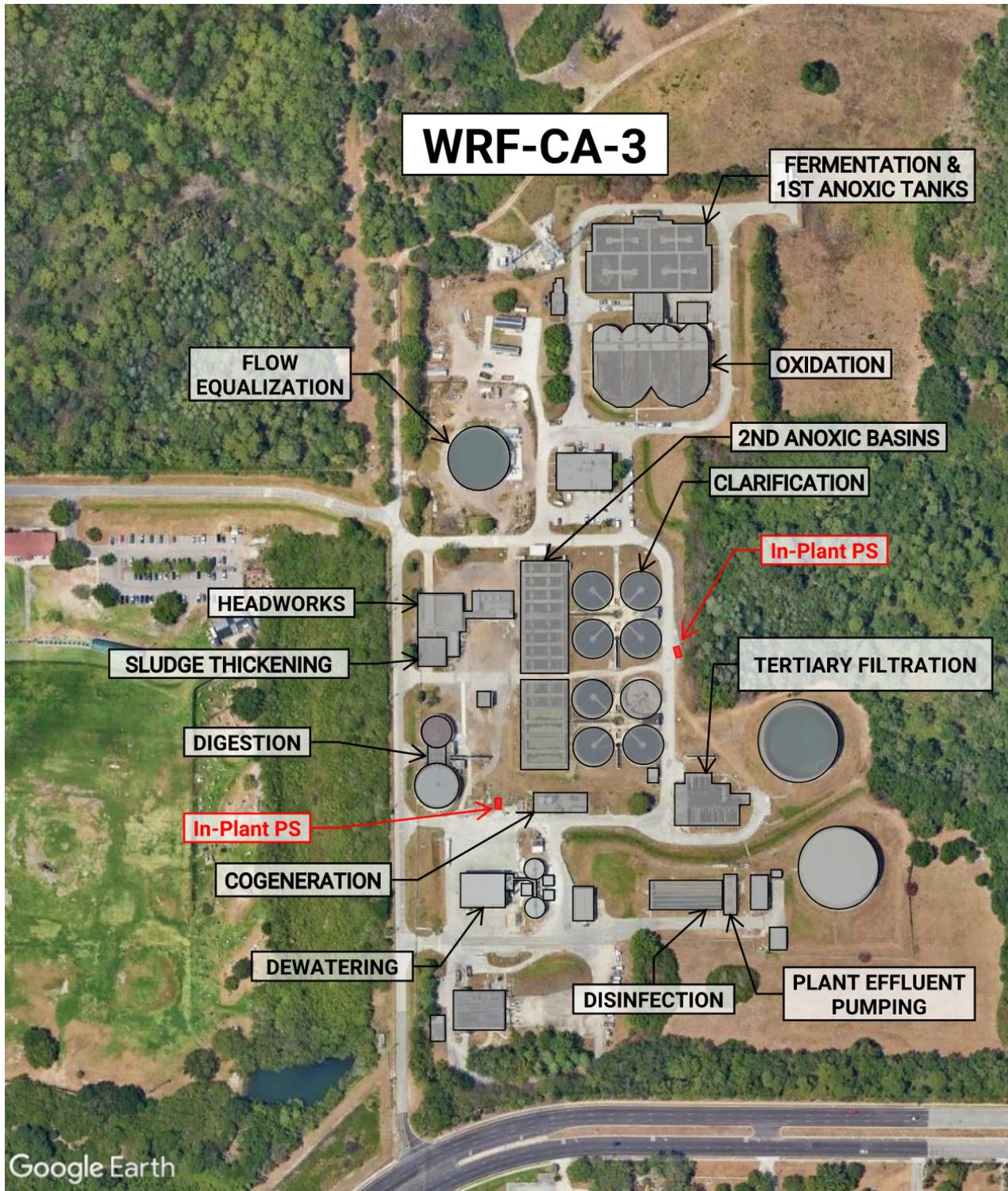
## **WRF-CA-2: FOG Removal R&R**

<b>Project Duration</b>	2026 – 2030 (5 Years)	
<b>Project Description</b>	<p><b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b>            Odor Control Pump (PMP-080), FOG Pump 1 (PMP-077), Red Pump 1 and 2 (PMP-078, PMP-079), East Tank B (TNK-017)</p>	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• PMP-077: 15 HP   1765 RPM</li> <li>• PMP-078: 150 GPM</li> <li>• PMP-079: 150 GPM</li> <li>• PMP-080: 16 MGD</li> <li>• TNK-017/NEWRF-FOGRS-ST2: 19,800 gallons   Steel</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$5,883,400
	Scope Contingency Cost (60%)	\$3,530,000
	Engineering Costs (20%)	\$1,882,700
	<b>Total Project Cost</b>	<b>\$11,296,100</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>• NORTHEAST WRF - DIGESTER GAS TO ELECTRICITY COGENERATION FACILITY, 2012, FIM04</li> </ul>	



## WRF-CA-3: In-Plant Pump Station R&R

<b>Project Duration</b>	2026 – 2030 (5 Years)	
<b>Project Description</b>	<p><b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b>  Pump Station #2 Sub Pump 1 and 2 (PMP-029, PMP-030), Pump Station #3 Pump 1, 2, and 3 Motors (MTR-059, MTR-095, MTR-096), Pump Station #3 Pumps 1, 2, and 3 (PMP-061, PMP-062, PMP-063)</p>	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• PMP-029/NEWRF-IPLS-IPLS2-SP2: 20 HP   900 GPM</li> <li>• PMP-030/NEWRF-IPLS-IPLS2-SP1: 20 HP   900 GPM</li> <li>• PMP-061/NEWRF-IPLS-IPLS1-SP1: 40 HP   1775 RPM   460 V   46 A   300 GPM</li> <li>• PMP-062/NEWRF-IPLS-IPLS1-SP2: 40 HP   1775 RPM   460 V   46 A   300 GPM</li> <li>• PMP-063/NEWRF-IPLS-IPLS1-SP3: 40 HP   1775 RPM   460 V   46 A   300 GPM</li> <li>• MTR-059/NEWRF-IPLS-IPPS3-SP1: 40 HP   1775 RPM   460 V   92 A</li> <li>• MTR-095/NEWRF-IPLS-IPPS3-SP2: 40 HP   1775 RPM   460 V   96 A</li> <li>• MTR-096: 40 HP   1775 RPM   460 V   92 A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$2,221,500
	Scope Contingency Cost (60%)	\$1,332,900
	Engineering Costs (20%)	\$710,900
	<b>Total Project Cost</b>	<b>\$4,265,300</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>• NORTHEAST ADVANCED POLLUTION CONTROL FACILITY CLEARWATER, FLORIDA, 1992, 92016</li> </ul>	





## WRF-CA-4: Digestion R&R

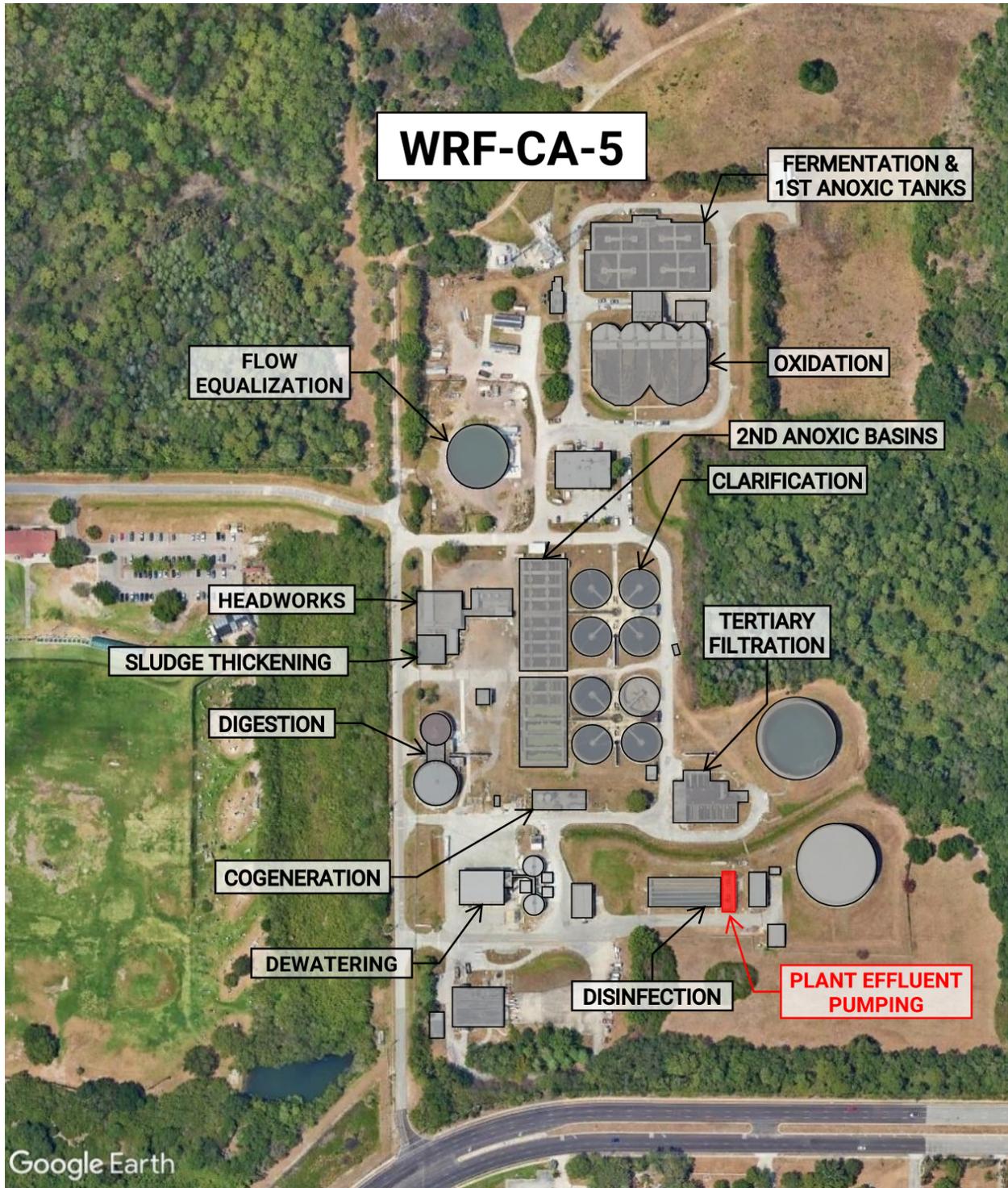
<b>Project Duration</b>	2026 – 2030 (5 Years)	
<b>Project Description</b>	<p><b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b>                  Boiler (BOIL-001), Combustion Fan (FAN-001), West and East Heat Exchange Pumps (PMP-040,PMP-041), South and North Recirculation Pumps (PMP-067, PMP-068), South and North Recirculation Pump Motors (MTR-042, MTR-081), Recirculation Pump 1 and 2 (PMP-037, PMP-038), Recirculation Pump 1 and 2 Motors (PMP-036, PMP-039), Secondary Digester (TNK-005), North and South Grinder Motor (MTR-043, MTR-082), North Grinder (GCP-405), North Sludge Pump (PMP-069), North Sludge Pump Motor (PMP-042).</p>	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• BOIL-001: 2 HP   460 V   9 A   150 GPM   30 PSI</li> <li>• FAN-001: 1/3 HP   2100 CFM   1750 RPM</li> <li>• PMP-040/NEWRF-D-HE-RLHERP1A-P: 2 HP   460 V   9 A   150 GPM</li> <li>• PMP-041/NEWRF-D-HE-RLHERP2A-P: 7.5 HP   1770 ROM   20.4 A   550 GPM</li> <li>• MTR-042/NEWRF-D-RP-RRP2A-M: 20 HP   1765 RPM   460 V   48 A</li> <li>• MTR-081/NEWRF-D-RP-RRP1A-M: 20 HP   1765 RPM   460 V   48 A</li> <li>• PMP-036/NEWRF-D-RP-RRP1A-M: 100 HP   460 V   4790 GPM</li> <li>• PMP-037/NEWRF-D-RP-RRP1A-P: 100 HP   1182 RPM   230 V   4790 GPM</li> <li>• PMP-038/NEWRF-D-RP-RRP2A-P: 100 HP   4790 GPM</li> <li>• TNK-005/NEWRF-D-SD: 65' DIA</li> <li>• MTR-043: 20 HP   1765 RPM   460 V   48 a</li> <li>• MTR-082: 3 HP   1770 RPM   460 V   7.68 A</li> <li>• PMP-069: 20 HP   1750 RPM   460 V   24 A</li> <li>• PMP-042: 20 HP   350 GPM</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$4,625,200
	Scope Contingency Cost (60%)	\$2,791,200
	Engineering Costs (20%)	\$1,488,600
	<b>Total Project Cost</b>	<b>\$8,931,800</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>• NEWRF ANAEROBIC DIGESTERS, 1985</li> <li>• BIOSOLIDS TREATMENT PROJECT IMPLEMENTATION -DIGESTER REFURBISHMENT - NORTHEAST ADVANCED POLLUTION CONTROL FACILITY, 2004, 03-0022-UT</li> </ul>	





## WRF-CA-5: Effluent R&R

<b>Project Duration</b>	2026 – 2030 (5 Years)	
<b>Project Description</b>	<p><b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b></p> <p>Reclaim Water Building Electrical Assets (ELEC-014), High Service Pumps 3, 4, 5, and 6 (PMP-057, PMP-060, PMP-056, PMP-059, PMP-055, PMP-058), High Service Pumps 3, 4, 5, and 6 Motors (MTR-055, MTR-058, MTR-054, MTR-057, MTR-053, MTR-056), North Pump (PMP-074), Middle Pump (PMP-075), South Pump (PMP-076)</p>	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• ELEC-014: N/A</li> <li>• MTR-053/NEWRF-E-HSPS-RP5A-M: 200 HP   1150 RPM   460 A   230 A</li> <li>• MTR-054/NEWRF-E-HSPS-RP3A-M: 200 HP   1190 RPM   460 A   230 A</li> <li>• MTR-056/NEWRF-E-HSPS-RP6A-M: 200 HP   1190 RPM   460 A   230 A</li> <li>• MTR-057/NEWRF-E-HSPS-RP4A-M: 200 HP   1190 RPM   460 A   230 A</li> <li>• MTR-058/NEWRF-E-HSPS-RP2A-M: 100 HP   1780 RPM   460 A   114 A</li> <li>• PMP-055/NEWRF-E-HSPS-RP5A-P: 233 HP   1200 RPM   460V   3300 GPM</li> <li>• PMP-056/NEWRF-E-HSPS-RP3A-P: 200 HP   1190 RPM   460 V   3500 GPM</li> <li>• PMP-058/NEWRF-E-HSPS-RP6A-P: 3500 GPM</li> <li>• PMP-059/NEWRF-E-HSPS-RP4A-P: 20 HP   460 V   3500 GPM</li> <li>• PMP-074/NEWRF-E-PRPS-RP3A-P: 10 HP</li> <li>• PMP-075/NEWRF-E-PRPS-RP2A-P: 10 HP</li> <li>• PMP-076NEWRF-E-PRPS-RP1A-P: 10 HP</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$2,322,100
	Scope Contingency Cost (60%)	\$1,393,300
	Engineering Costs (20%)	\$743,100
	<b>Total Project Cost</b>	<b>\$4,458,500</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>• NORTHEAST ADVANCED POLLUTION CONTROL FACILITY IMPROVEMENTS, 2003</li> </ul>	



## WRF-CA-6: Generators and Fuel Storage R&R

<b>Project Duration</b>	2026 – 2030 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> North Twin Electrical (ELEC-003)	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>ELEC-003/NEWRWF-B-NT-E: 1800 RPM   480 V   1128 A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$844,300
	Scope Contingency Cost (60%)	\$506,600
	Engineering Costs (20%)	\$270,200
	<b>Total Project Cost</b>	<b>\$1,621,100</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	





## WRF-CA-7: Maintenance Building R&R

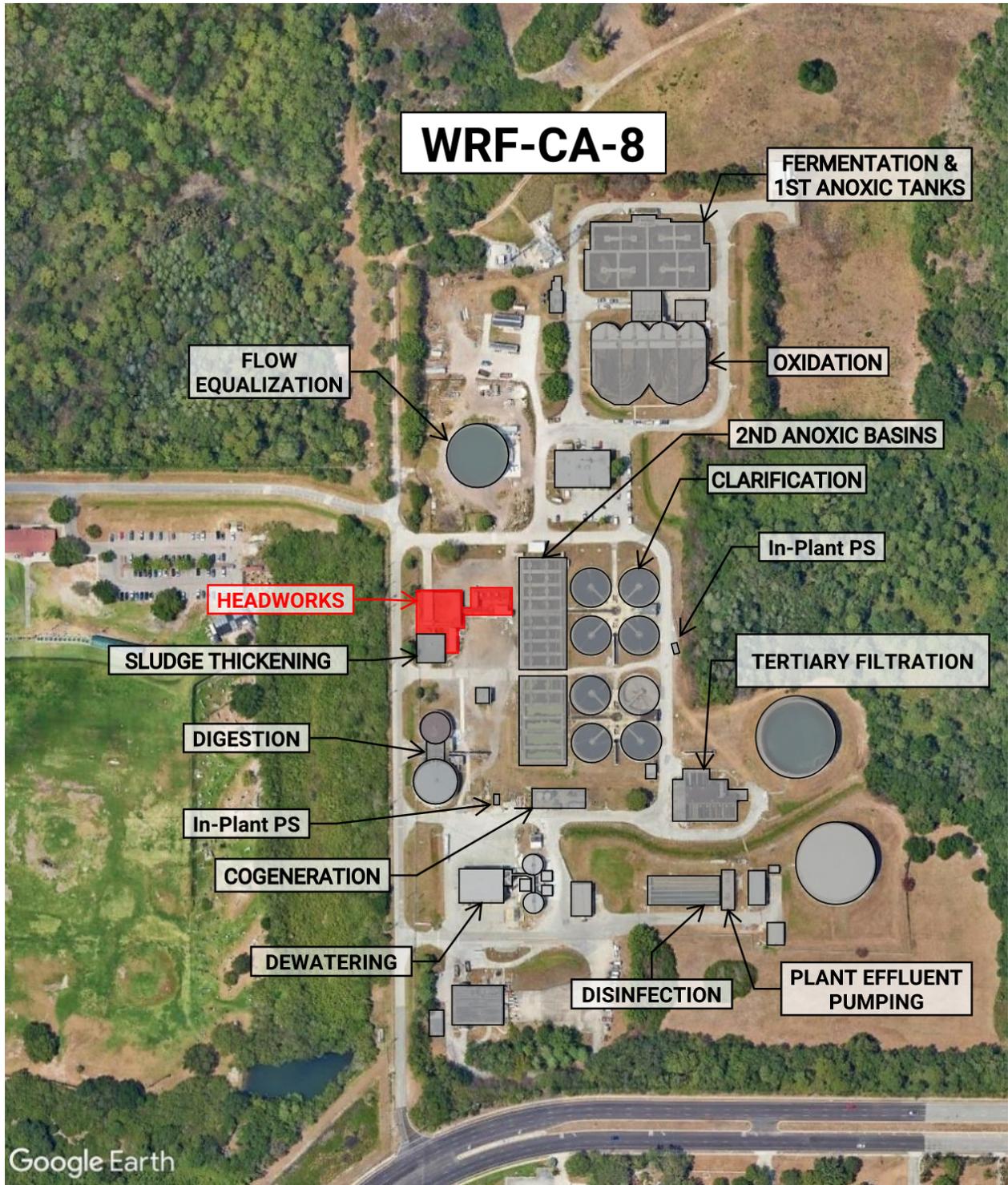
<b>Project Duration</b>	2026 – 2030 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Maintenance Building Electrical Equipment (ELEC-013)	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>ELEC-013/NEWRF-B-ACB-E: N/A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$1,125,200
	Scope Contingency Cost (60%)	\$675,100
	Engineering Costs (20%)	\$360,100
	<b>Total Project Cost</b>	<b>\$2,160,400</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	





## WRF-CA-8: Primary Treatment R&R

<b>Project Duration</b>	2026 – 2030 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Flow Diversion Structure (FLUM-001)	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>FLUM-001: N/A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$35,300
	Scope Contingency Cost (60%)	\$21,200
	Engineering Costs (20%)	\$11,300
	<b>Total Project Cost</b>	<b>\$67,800</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>NORTHEAST ADVANCED POLLUTION CONTROL FACILITY CLEARWATER, FLORIDA, 92019, 1988</li> </ul>	

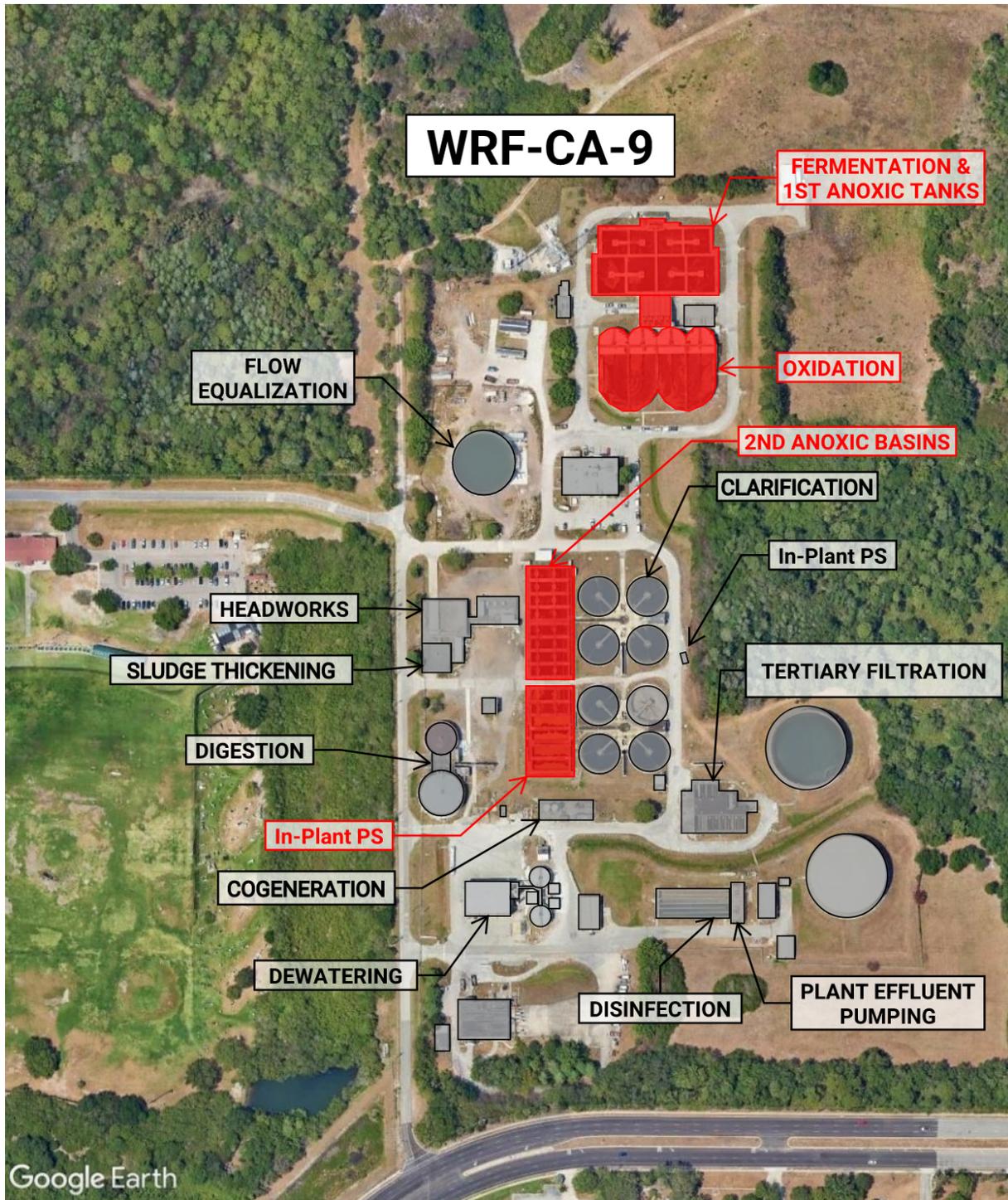




## WRF-CA-9: Secondary Treatment Biological R&R

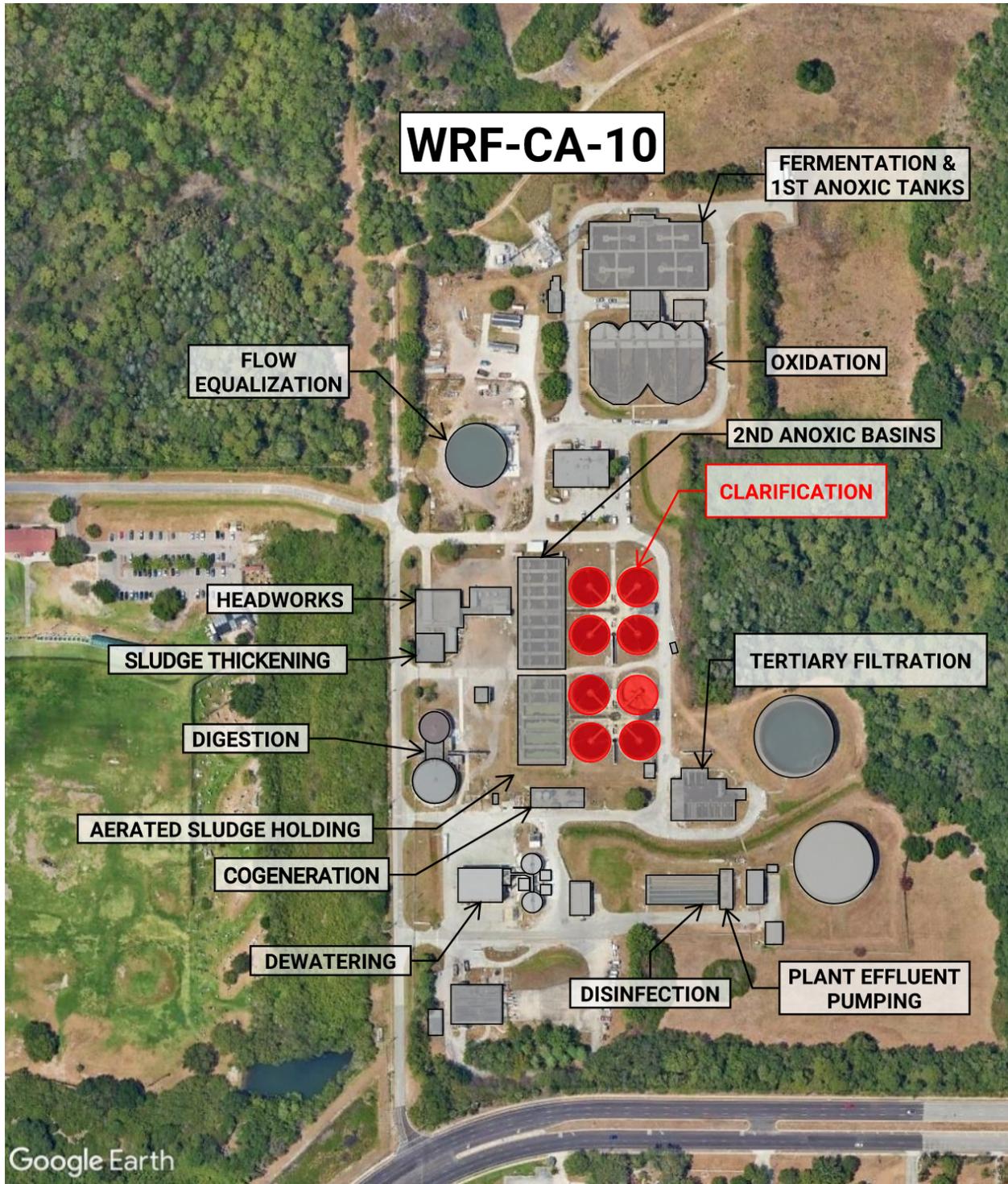
<b>Project Duration</b>	2026 – 2030 (5 Years)
<b>Project Description</b>	<p><b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b></p> <p>Inlet Gate (GATE-030), Outlet Gate (GATE-031), Tanks 2, 3, and 4 East Slide Gates (GATE-039, GATE-040, GATE-041), Tanks 1, 2, 3, and 4 Structure (TNK-001, TNK-002, TNK-003, TNK-004), Fermentation Basin Mixers 1 and 2 (MIX-003, MIX-004), Fermentation Basin 2 Mixers 3 and 4 (MIX-001, MIX-002), Basin 2 Gates 1 and 2 (GATE-001, GATE-002), Basin 1 Gates 2 (EAST and WEST) (GATE-003, GATE-004), Basin 1 Gate 3 (GATE-005), First Anoxic Tank 1 Mixers 1 and 2 (MIX-005, MIX-006), First Anoxic Tank 2 Mixer 4 (MIX-007), West Side Inlet Gate (GATE-029) Gate to South Clarifiers (GATE-042), East Side Gate of Anoxic Basin 9 (GATE-043), Second Anoxic Basins 1-10 Mixers (MIX-016, MIX-017, MIX-018, MIX-019, MIX-020, MIX-021, MIX-022, MIX-023, MIX-024, MIX-025, MIX-026, MIX-027, MIX-028, MIX-029, MIX-030, MIX-031, MIX-032, MIX-033 MIX-034, MIX-035), Second Anoxic Basins 1-8 Gates (GATE-016, GATE-017, GATE-018, GATE-019, GATE-020, GATE-021, GATE-022, GATE-023, GATE-024, GATE-028), Switches (ELEC-001), Switch Gear (ELEC-033), Ox Ditch 1 and 2 Gates (GATE-014, GATE-015), Oxidation Ditch Aerators 1-4 (AER-001, AER-002, AER-003, AER-004), West Isolation Gate (GATE-011), Pumps 1-5 (PMP-001, PMP-002, PMP-003, PMP-004, PMP-005), Sub Pump Panel (ELEC-002), Sub Pumps 1-3 (PMP-006, PMP-007, PMP-008)</p>
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• TNK-001/NEWRF-D-AD-T1: N/A</li> <li>• TNK-002/NEWRF-D-AD-T2: N/A</li> <li>• TNK-003/NEWRF-D-AD-T3: N/A</li> <li>• TNK-004/NEWRF-D-AD-T4: N/A</li> <li>• MIX-001: 2 HP   1750 RPM   230 V   5.22 A</li> <li>• MIX-002/NEWRF-BT-AF-FB3-FMA-M: N/A</li> <li>• MIX-003: 2 HP   1800 RPM   230 V   5.22 A</li> <li>• MIX-004/NEWRF-BT-AF-FB1-FMA-M: 2 HP   1750 RPM   230 V   5.22 A</li> <li>• MIX-005/NEWRF-BT-1SAB-1SAT1-M1A: 5 HP   1755 RPM   230 V   12.9 A</li> <li>• MIX-006/NEWRF-BT-1SAB-1SAT1-M2A: 5 HP   1755 RPM   230 V   12.9 A</li> <li>• MIX-007/NEWRF-BT-1SAB-1SAT2-M2A: 5 HP   1755 RPM   230 V   12.9 A</li> <li>• MIX-016/NEWRF-BT-2SAB-2SAT1-M2A: 1 HP   1760 RPM   230 V   2.78 A</li> <li>• MIX-017/NEWRF-BT-2SAB-2SAT1-M1A: 1 HP   1760 RPM   230 V   2.78 A</li> <li>• MIX-018/NEWRF-BT-2SAB-2SAT2-M1A: 1 HP   1760 RPM   230 V   2.78 A</li> <li>• MIX-019/NEWRF-BT-2SAB-2SAT2-M2A: 1 HP   1760 RPM   230 V   2.82 A</li> <li>• MIX-020/NEWRF-BT-2SAB-2SAT3-M2A: 1 HP   1760 RPM   230 V   2.78 A</li> <li>• MIX-021/NEWRF-BT-2SAB-2SAT3-M1A: 1 HP</li> <li>• MIX-022/NEWRF-BT-2SAB-2SAT4-M1A: 1 HP   1760 RPM   230 V   2.78 A</li> <li>• MIX-023/NEWRF-BT-2SAB-2SAT4-M2A: 1 HP   1760 RPM   230 V   2.78 A</li> <li>• MIX-024/NEWRF-BT-2SAB-2SAT5-M2A: 1 HP   1760 RPM   230 V   2.82 A</li> </ul>

	<ul style="list-style-type: none"> <li>• MIX-025/NEWRF-BT-2SAB-2SAT5-M1A: 1 HP   1760 RPM   230 V   2.78 A</li> <li>• MIX-026/NEWRF-BT-2SAB-2SAT6-M1A: 1 HP   1760 RPM   230 V   2.78 A</li> <li>• MIX-027/NEWRF-BT-2SAB-2SAT6-M2A: 1 HP   1760 RPM   230 V   2.78 A</li> <li>• MIX-028/NEWRF-BT-2SAB-2SAT7-M2A: 1 HP   1760 RPM   230 V   2.78 A</li> <li>• MIX-029/NEWRF-BT-2SAB-2SAT7-M1A: 1 HP   1760 RPM   230 V   2.78 A</li> <li>• MIX-030/NEWRF-BT-2SAB-2SAT8-M1A: 1 HP   1760 RPM   230 V   2.78 A</li> <li>• MIX-031/NEWRF-BT-2SAB-2SAT8-M2A: 1 HP   1760 RPM   208 V</li> <li>• MIX-032/NEWRF-BT-2SAB-2SAT9-M1A: 1 HP   1760 RPM   230 V   2.78 A</li> <li>• MIX-033/NEWRF-BT-2SAB-2SAT9-M2A: 1 HP   1760 RPM   230 V   2.78 A</li> <li>• MIX-034/NEWRF-BT-2SAB-2SAT10-M2A: 1 HP   1760 RPM   230 V   2.82 A</li> <li>• MIX-035/NEWRF-BT-2SAB-2SAT10-M1A: 1 HP   1760 RPM   230 V   2.82 A</li> <li>• ELEC-001: 180V   802 A</li> <li>• AER-001/NEWRF-BT-OA-COB-B1W-ICMAMA: 125 HP</li> <li>• AER-002/NEWRF-BT-OA-COB-B1W-OCMAMA: 125 HP</li> <li>• AER-003/NEWRF-BT-OA-COB-B2E-ICMAMA-GB: 125 HP   1190 RPM   460 V   118 A</li> <li>• AER-004/NEWRF-BT-OA-COB-B2E-OCMAMA: 125 HP</li> <li>• PMP-001/NEWRF-BT-P-SP5A-P: 125 HP   22,150 GPM</li> <li>• PMP-002/NEWRF-BT-P-SP4A-P: 125 HP   1587 RPM   460 V   22,150 GPM</li> <li>• PMP-003/NEWRF-BT-P-SP3A-P: 125 HP   22,150 GPM</li> <li>• PMP-004/NEWRF-BT-P-SP2A-P: 125 HP   22,150 GPM</li> <li>• PMP-005/NEWRF-BT-P-SP1A-P: 125 HP   22,150 GPM</li> <li>• ELEC-002: 120 HP</li> <li>• PMP-006/NEWRF-BT-P-IPS-SP1-P: 135 HP   1030 GPM</li> <li>• PMP-007/NEWRF-BT-P-IPS-SP2-P: 135 HP   1030 GPM</li> <li>• PMP-008/NEWRF-BT-P-IPS-SP3-P: 135 HP   1030 GPM</li> </ul>	
<p><b>Project Costs</b></p>	<p>Total Construction Costs</p>	<p>\$10,334,100</p>
	<p>Scope Contingency Cost (60%)</p>	<p>\$6,200,500</p>
	<p>Engineering Costs (20%)</p>	<p>\$3,306,900</p>
	<p><b>Total Project Cost</b></p>	<p><b>\$19,841,500</b></p>
<p><b>Record Drawing References</b></p>	<ul style="list-style-type: none"> <li>• NORTHEAST ADVANCED POLLUTION CONTROL FACILITY CLEARWATER, FLORIDA, 1992, 92016</li> <li>• NORTHEAST WATER RECLAMATION FACILITY SCREW LIFT STATION UPGRADES, 2015, 12-0017-UT</li> <li>• RECYCLE SYSTEM IMPROVEMENTS, 2004, 05-0023-UT</li> <li>• NORTHEAST WRF MIXER REPLACEMENT, 2012, FIM07</li> </ul>	



## WRF-CA-10: Secondary Treatment Clarifiers R&R

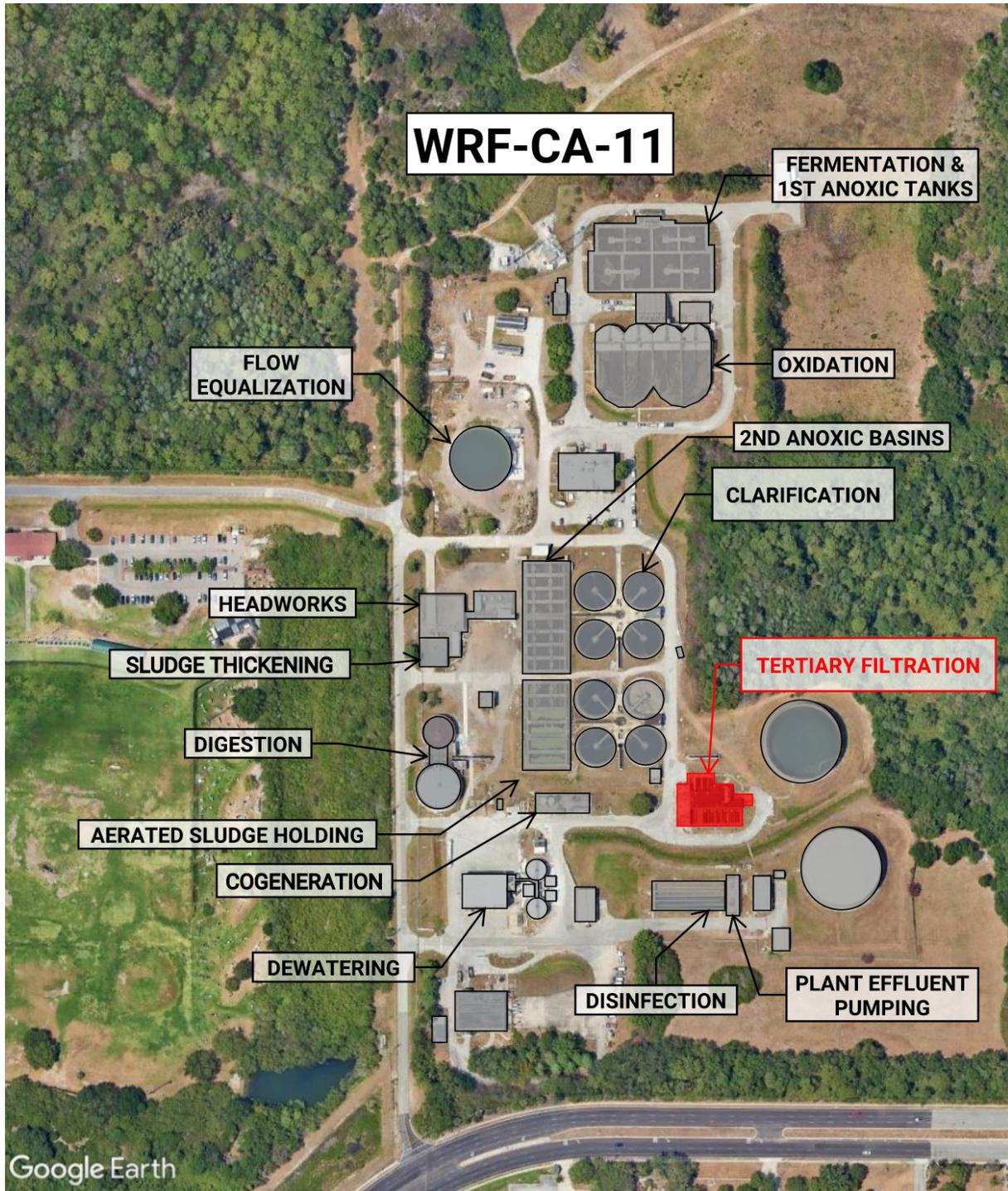
<b>Project Duration</b>	2026 – 2030 (5 Years)	
<b>Project Description</b>	<p><b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b>  Clarifiers 1-8 Mixers (MIX-008, MIX-009, MIX-010, MIX-011, MIX-012, MIX-013, MIX-014, MIX-015), North RAS Electrical Equipment (ELEC-004), North and South Clarifier Ejectors (PMP-014, PMP-015, PMP-016, PMP-017), South WAS Pumps 1 and 2 (PMP-020, PMP-021)</p>	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• MIX-008/NEWRF-ST-C-N-C2-SAR: 0.75 HP   1690 RPM   230 V   2.5 A</li> <li>• MIX-009/NEWRF-ST-C-N-C1-SAR: 0.75 HP   1690 RPM   230 V   2.5 A</li> <li>• MIX-010/NEWRF-ST-C-N-C3-SAR: 0.75 HP   1690 RPM   230 V   2.5 A</li> <li>• MIX-011/NEWRF-ST-C-N-C4-SAR: 0.75 HP   1690 RPM   230 V   2.5 A</li> <li>• MIX-012/NEWRF-ST-C-S-C6-SAR: 0.75 HP   1710 RPM   270 V   1.35 A</li> <li>• MIX-015/NEWRF-ST-C-S-C7-SAR: 0.75 HP   1710 RPM   270 V   1.35 A</li> <li>• PMP-010/NEWRF-ST-RWPS-NPH-RASP1A-P: 1190 RPM   4500 GPM</li> <li>• PMP-011/NEWRF-ST-RWPS-NPH-RASP2A-P: 40 HP   1190 RPM   4500 GPM</li> <li>• ELEC-004: 40 HP   1190 RPM   460 V   46 A</li> <li>• PMP-014/NEWRF-ST-C-N-C12SPA-P: 35 GPM</li> <li>• PMP-015/NEWRF-ST-C-N-C34SPA-P: 35 GPM</li> <li>• PMP-016/NEWRF-ST-C-S-C56SPA-P: 35 GPM</li> <li>• PMP-017/NEWRF-ST-C-S-C78SPA-P: 35 GPM</li> <li>• PMP-020/NEWRF-ST-RWPS-SPH-WASP2A-P: 10 HP   200 GPM</li> <li>• PMP-021/NEWRF-ST-RWPS-SPH-WASP1A-P: 10 HP   200 GPM</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$596,100
	Scope Contingency Cost (60%)	\$357,700
	Engineering Costs (20%)	\$190,800
	<b>Total Project Cost</b>	<b>\$1,144,600</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>• NORTHEAST WRF IMPROVEMENTS PROJECT, 2022, 19-0029-UT</li> <li>• CLEARWATER CLARIFIER REHABILITATION, 2010, 12-0025-UT</li> </ul>	





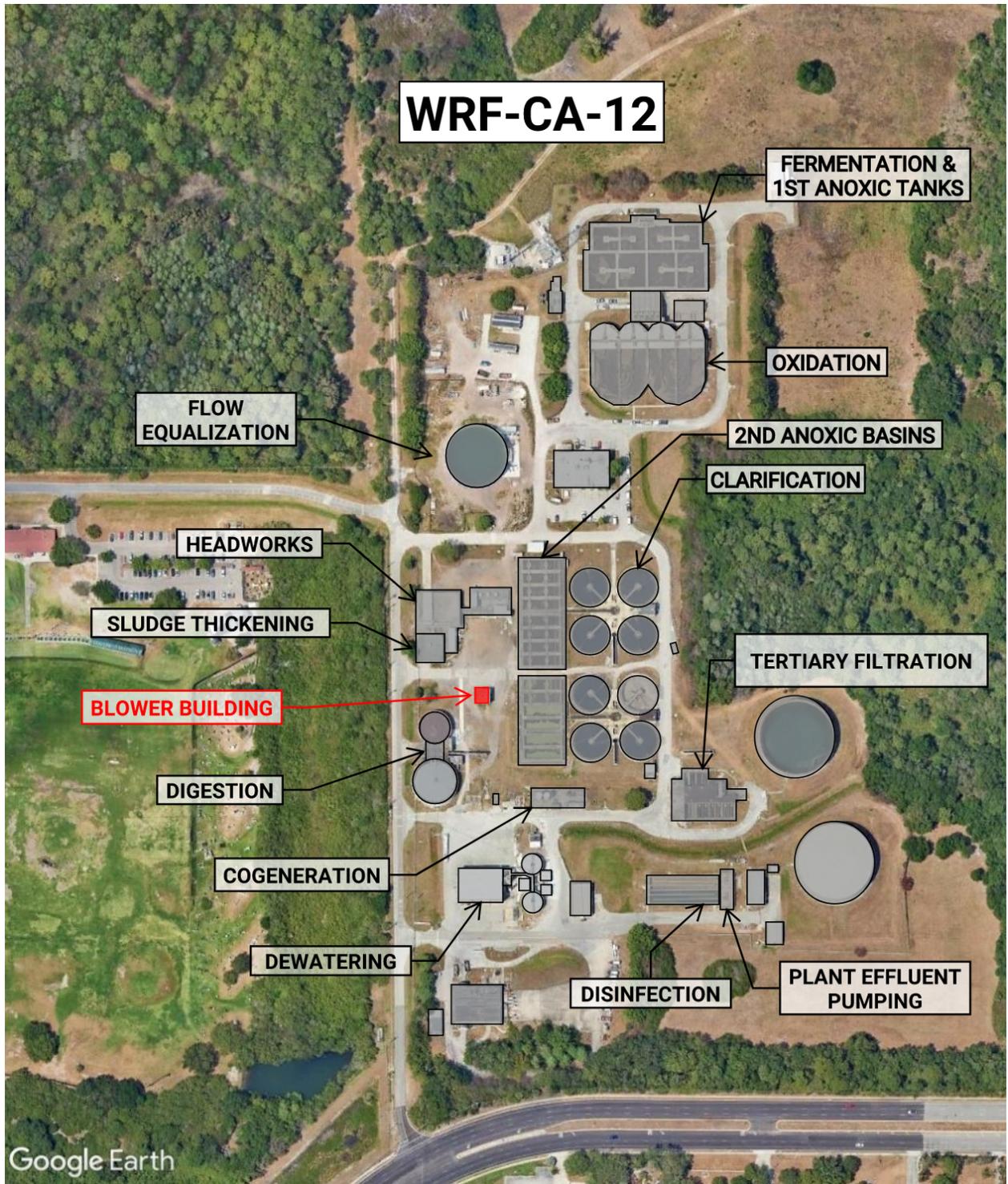
## WRF-CA-11: Tertiary Filters R&R

<b>Project Duration</b>	2026 – 2030 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Reject Storage Tank (TNK-015)	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>TNK-015/NEWRF-TF-RL-RT: 3.5 MG</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$4,935,000
	Scope Contingency Cost (60%)	\$2,961,000
	Engineering Costs (20%)	\$1,579,200
	<b>Total Project Cost</b>	<b>\$9,475,200</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>NORTHEAST ADVANCED POLLUTION CONTROL FACILITY CLEARWATER, FLORIDA, 1992, 92016</li> <li>NORTHEAST FILTER REHABILITATION, 2007, 03-0066-UT</li> </ul>	



## WRF-CA-12: Maintenance Building R&R

<b>Project Duration</b>	2031 – 2035 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Blowers 1 and 2 (BLW-001, BLW-002), Blowers 1 and 2 Motors (MTR-077, MTR-078)	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• BLW-001/NEWRF-B-BB-B1: 150 HP   3560 RPM   460 V   164 A</li> <li>• BLW-002/NEWRF-B-BB-B2: 150 HP   3560 RPM   460 V   164 A</li> <li>• MTR-077/NEWRF-B-BB-B1-M: 150 HP   3560 RPM   460 V   164 A</li> <li>• MTR-078/NEWRF-B-BB-B2-M: 150 HP   3560 RPM   460 V   164 A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$1,480,500
	Scope Contingency Cost (60%)	\$888,300
	Engineering Costs (20%)	\$473,800
	<b>Total Project Cost</b>	<b>\$2,842,600</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>	



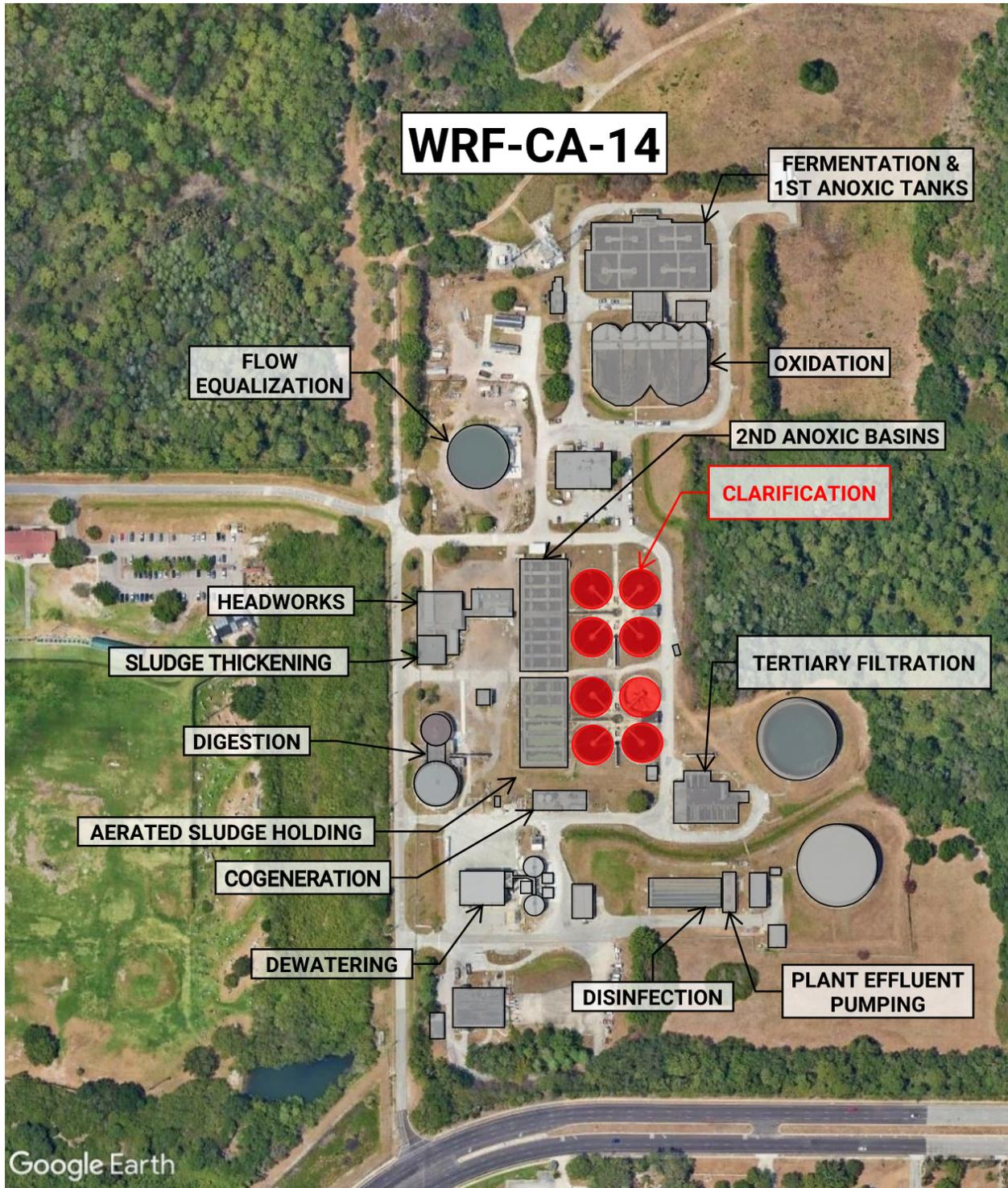
## WRF-CA-13: Secondary Treatment Biological

<b>Project Duration</b>	2031 – 2035 (5 Years)	
<b>Project Description</b>	<p><b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b>  MCC-20 (MCC-20), Screw Pump 5 (GATE-010), Gates (GATE-013), Pumps 2-5 (MTR-006, MTR-007, MTR-008, MTR-009), Sub Pump Piping (PIPE-002)</p>	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• MCC-20: 180 V   800 A</li> <li>• MTR-006/NEWRF-BT-P-SP2A-M: 55 HP   1780 RPM   460 V   140 A   1970 lbs</li> <li>• MTR-007/NEWRF-BT-P-SP3A-M: 125 HP   1780 RPM   460 V   140 A   1970 lbs</li> <li>• MTR-008/NEWRF-BT-P-SP4A-M: 125 HP   1780 RPM   460 V   140 A   1970 lbs</li> <li>• MTR-009/NEWRF-BT-P-SP5A-M: 125 HP   1780 RPM   460 V   140 A   1970 lbs</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$524,700
	Scope Contingency Cost (60%)	\$314,800
	Engineering Costs (20%)	\$167,900
	Easements, Land Acquisition and Other Costs	\$700
	<b>Total Project Cost</b>	<b>\$1,008,100</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>• NORTHEAST ADVANCED POLLUTION CONTROL FACILITY CLEARWATER, FLORIDA, 1992, 92016</li> <li>• NORTHEAST WATER RECLAMATION FACILITY SCREW LIFT STATION UPGRADES, 2015, 12-0017-UT</li> </ul>	



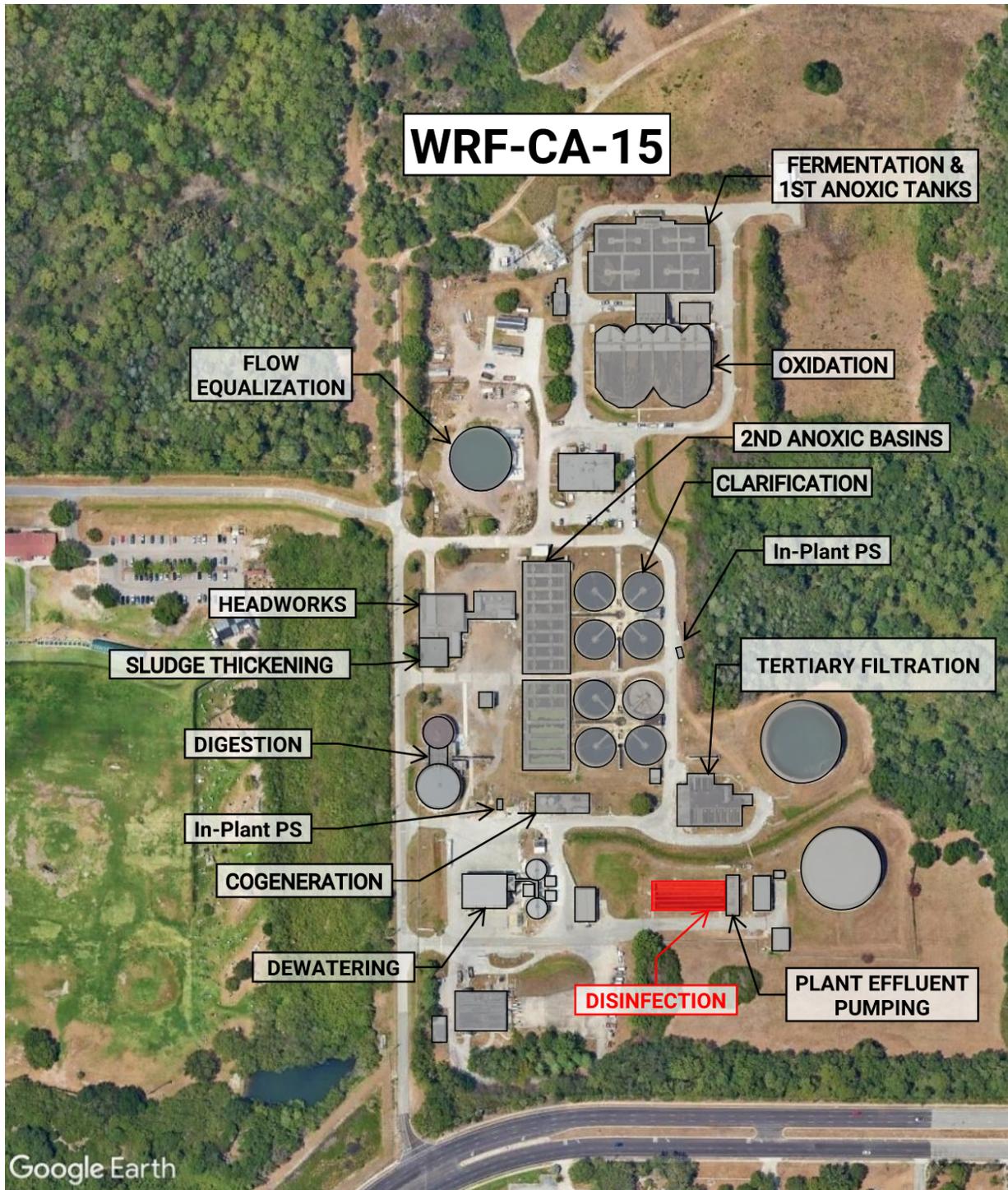
## WRF-CA-14: Secondary Treatment Clarifiers R&R

<b>Project Duration</b>	2031 – 2035 (5 Years)	
<b>Project Description</b>	<p><b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b>  North and South Pump House (PIPE-003, PIPE-004), RAS South (MTR-023, PMP-018, MTR-024, PMP-019), WAS North (PMP-012, PMP-013, MTR-015, MTR-016)</p>	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• MTR-023/NEWRF-ST-RWPS-SPH-RASP1A-M: 50 HP   1185 RPM   460 V   120 A</li> <li>• PMP-018/NEWRF-ST-RWPS-SPH-RASP1A-P: 50 HP   1190 RPM   4700 GPM   12 x 12 x 15</li> <li>• MTR-024/NEWRF-ST-RWPS-SPH-RASP2A-M: 50 HP   1185 RPM   460 V   120 A</li> <li>• PMP-019/NEWRF-ST-RWPS-SPH-RASP2A-P: 50 HP   1190 RPM   4700 GPM   12 x 12 x 15   60 PSI</li> <li>• PMP-012/NEWRF-ST-RWPS-NPH-WASP1A-P: 10 HP   1700 RPM   230 V   20 A   200 GPM</li> <li>• PMP-013/NEWRF-ST-RWPS-NPH-WASP2A-P: 10 HP   1760 RPM   230 V   25 A   200 GPM</li> <li>• MTR-015/NEWRF-ST-RWPS-NPH-WASP2A-M: 10 HP   1760 RPM   460 V   25 A</li> <li>• MTR-016/NEWRF-ST-RWPS-NPH-WASP1A-M: 10 HP   1700 RPM   460 V   25 A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$410,800
	Scope Contingency Cost (60%)	\$246,500
	Engineering Costs (20%)	\$131,500
	Easements, Land Acquisition and Other Costs	\$300
	<b>Total Project Cost</b>	<b>\$789,100</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>• NORTHEAST WRF IMPROVEMENTS PROJECT, 2022, 19-0029-UT</li> <li>• CLEARWATER CLARIFIER REHABILITATION, 2010, 12-0025-UT</li> </ul>	



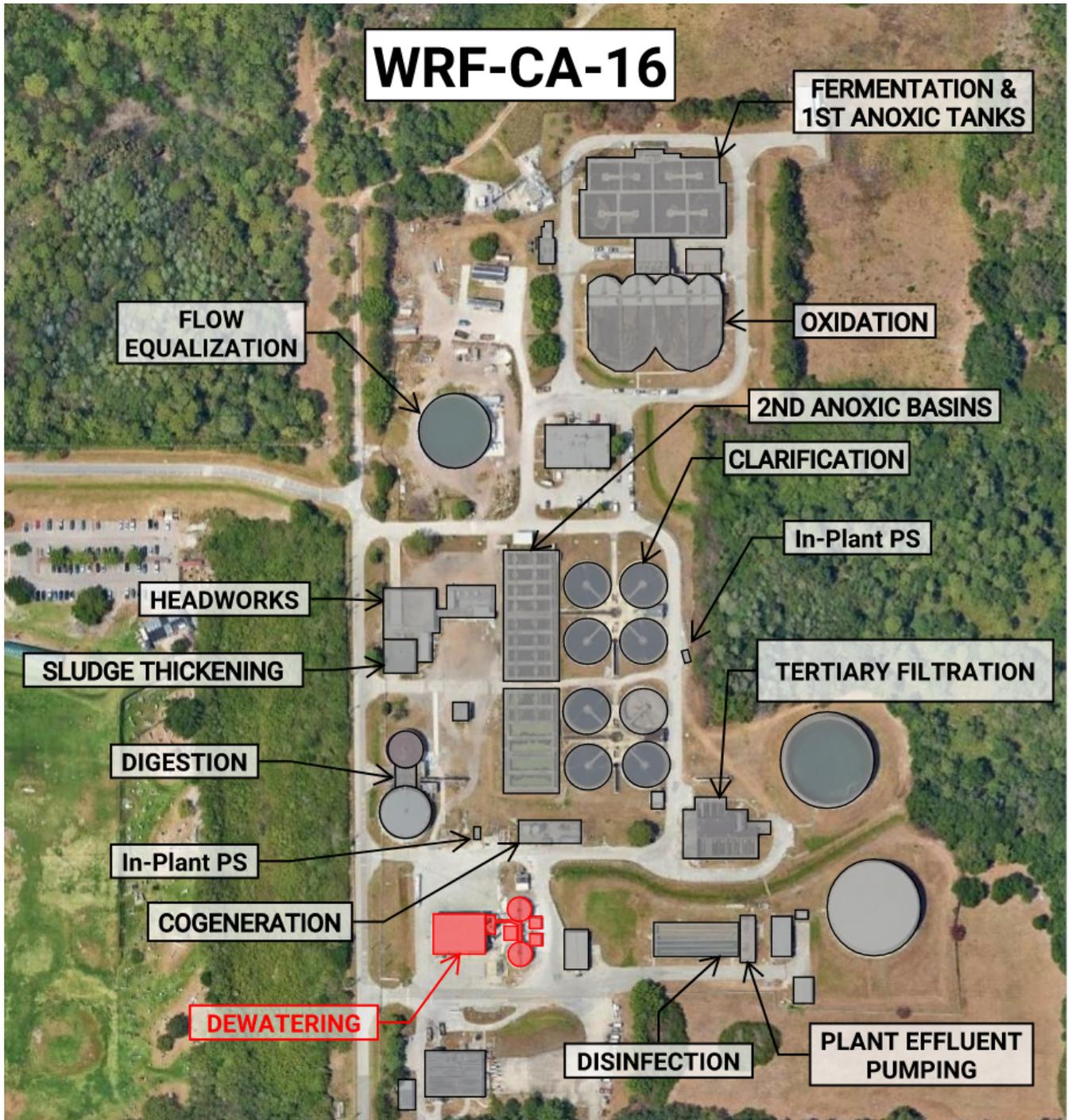
## WRF-CA-15: Disinfection R&R

<b>Project Duration</b>	2031 – 2035 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Sampling Pump (PMP-083), Disinfection Gates 1, 2, and 3 (GATE-032, GATE-033, GATE-034), Sodium Hypochlorite Storage Tank 1 and 2 (TNK-010, TNK-011), Sodium Bisulfate Tank #1 (TNK-012)	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• PMP-083: 0.75 HP   3450 RPM</li> <li>• TNK-010/NEWRF-CFS-SHD-ST1: N/A</li> <li>• TNK-011/NEWRF-CFS-SHD-ST2: 1000 GAL</li> <li>• TNK-012/NEWRF-CFS-SB-ST1: N/A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$213,100
	Scope Contingency Cost (60%)	\$172,900
	Engineering Costs (20%)	\$68,200
	<b>Total Project Cost</b>	<b>\$409,200</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>• NORTHEAST ADVANCED POLLUTION CONTROL FACILITY IMPROVEMENTS, 2003</li> </ul>	



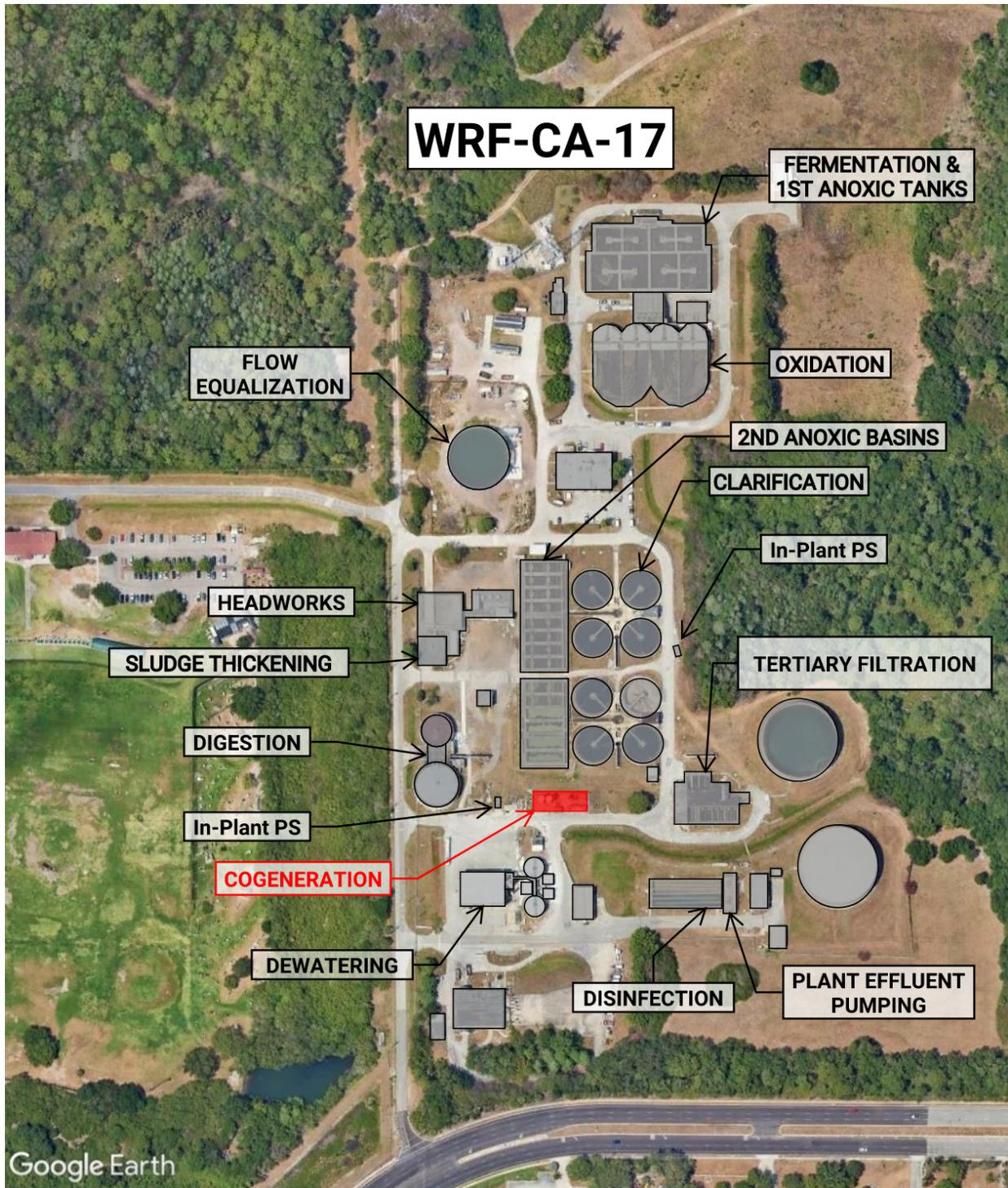
## WRF-CA-16: Dewatering and Solids Handling R&R

<b>Project Duration</b>	2031 – 2035 (5 Years)	
<b>Project Description</b>	<p><b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b>            Centrifuge Panels (ELEC-031), Pump 1 and 2 (PMP-027, PMP-028), Electrical Panels (ELEC-010)</p>	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• ELEC-010: N/A</li> <li>• ELEC-031/NEWRF-DW-C-CP: N/A</li> <li>• PMP-027: 7.5 HP   50 GPM</li> <li>• PMP-028: 7.5 HP   50 GPM</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$134,400
	Scope Contingency Cost (60%)	\$80,600
	Engineering Costs (20%)	\$43,000
	<b>Total Project Cost</b>	<b>\$258,000</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>• NEWRF DEWATERING CENTRIFUGE, 2014, FIM03</li> </ul>	



## WRF-CA-17: FOG Removal R&R

<b>Project Duration</b>	2031 – 2035 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Blower (BLW-003), Tank A (TNK-016), Natural Gas Tank (TNK-018)	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• BLW-003: N/A</li> <li>• TNK-016/NEWRF-FOGRS-ST1: 19,800 gallons   Steel</li> <li>• TNK-018: 100 gallons   Stainless Steel</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$853,300
	Scope Contingency Cost (60%)	\$512,000
	Engineering Costs (20%)	\$273,100
	<b>Total Project Cost</b>	<b>\$1,638,400</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>• NORTHEAST WRF - DIGESTER GAS TO ELECTRICITY COGENERATION FACILITY, 2012, FIM04</li> </ul>	



## WRF-CA-18: Effluent R&R

<b>Project Duration</b>	2031 – 2035 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Plant Reuse Pump Station Piping (PIPE-009) and Reuse Storage Tank (TNK-013)	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>TNK-013/NEWRF-E-S-RST: 5 MG   Concrete</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$7,579,800
	Scope Contingency Cost (60%)	\$4,547,900
	Engineering Costs (20%)	\$2,425,500
	Easements, Land Acquisition and Other Costs	\$900
	<b>Total Project Cost</b>	<b>\$14,554,100</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>NORTHEAST ADVANCED POLLUTION CONTROL FACILITY IMPROVEMENTS, 2003</li> </ul>	



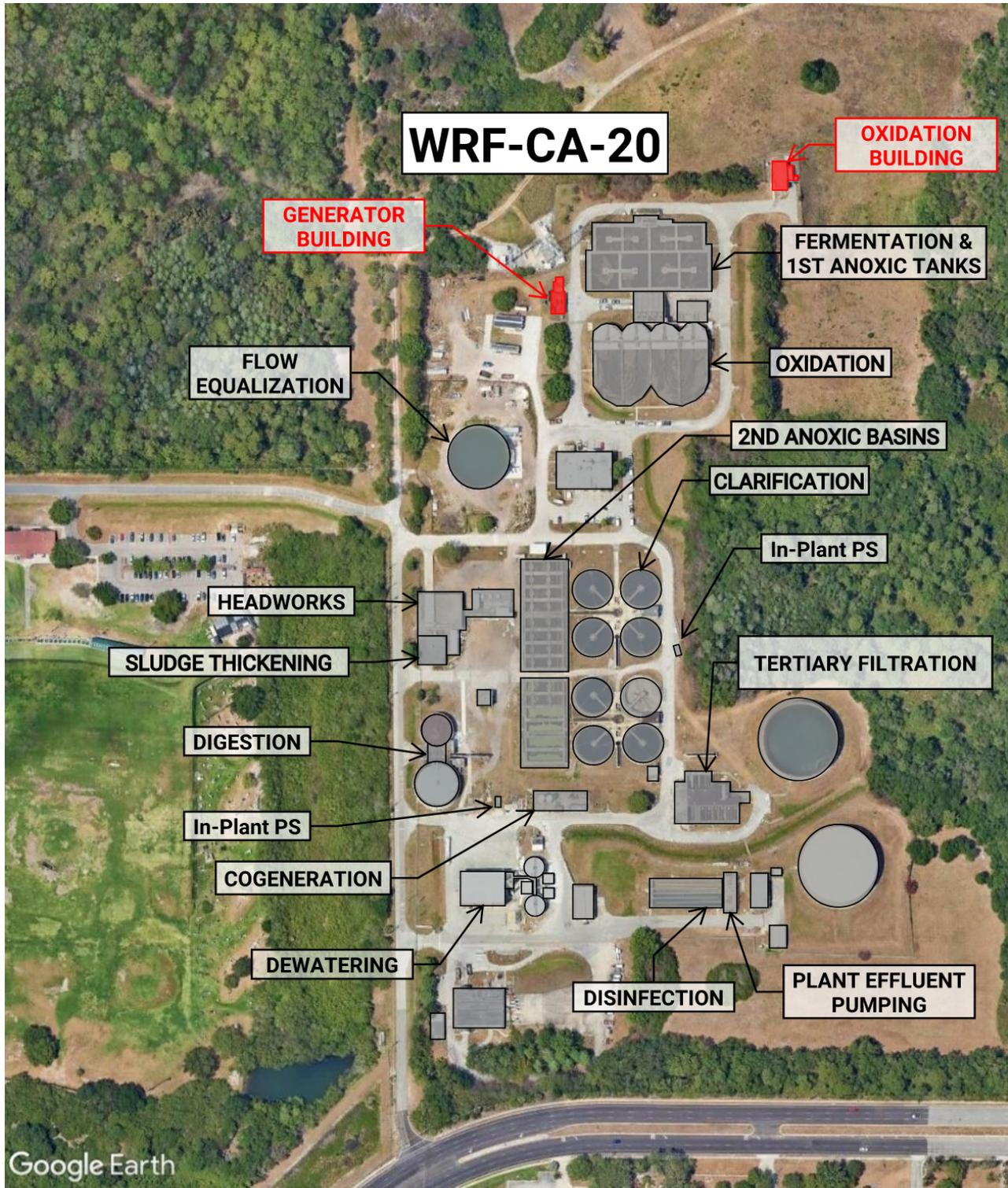
## WRF-CA-19: Digestion R&R

<b>Project Duration</b>	2031 – 2035 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Digester Building Piping (PIPE-007) and South Grinder (GCP 406)	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>GCP 406: 7.5 HP</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$150,200
	Scope Contingency Cost (60%)	\$90,100
	Engineering Costs (20%)	\$48,100
	Easements, Land Acquisition, and other Costs	\$900
	<b>Total Project Cost</b>	<b>\$289,300</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>NEWRF ANAEROBIC DIGESTERS, 1985</li> <li>BIOSOLIDS TREATMENT PROJECT IMPLEMENTATION -DIGESTER REFURBISHMENT - NORTHEAST ADVANCED POLLUTION CONTROL FACILITY, 2004, 03-0022-UT</li> </ul>	



## WRF-CA-20: Generators & Fuel Storage R&R

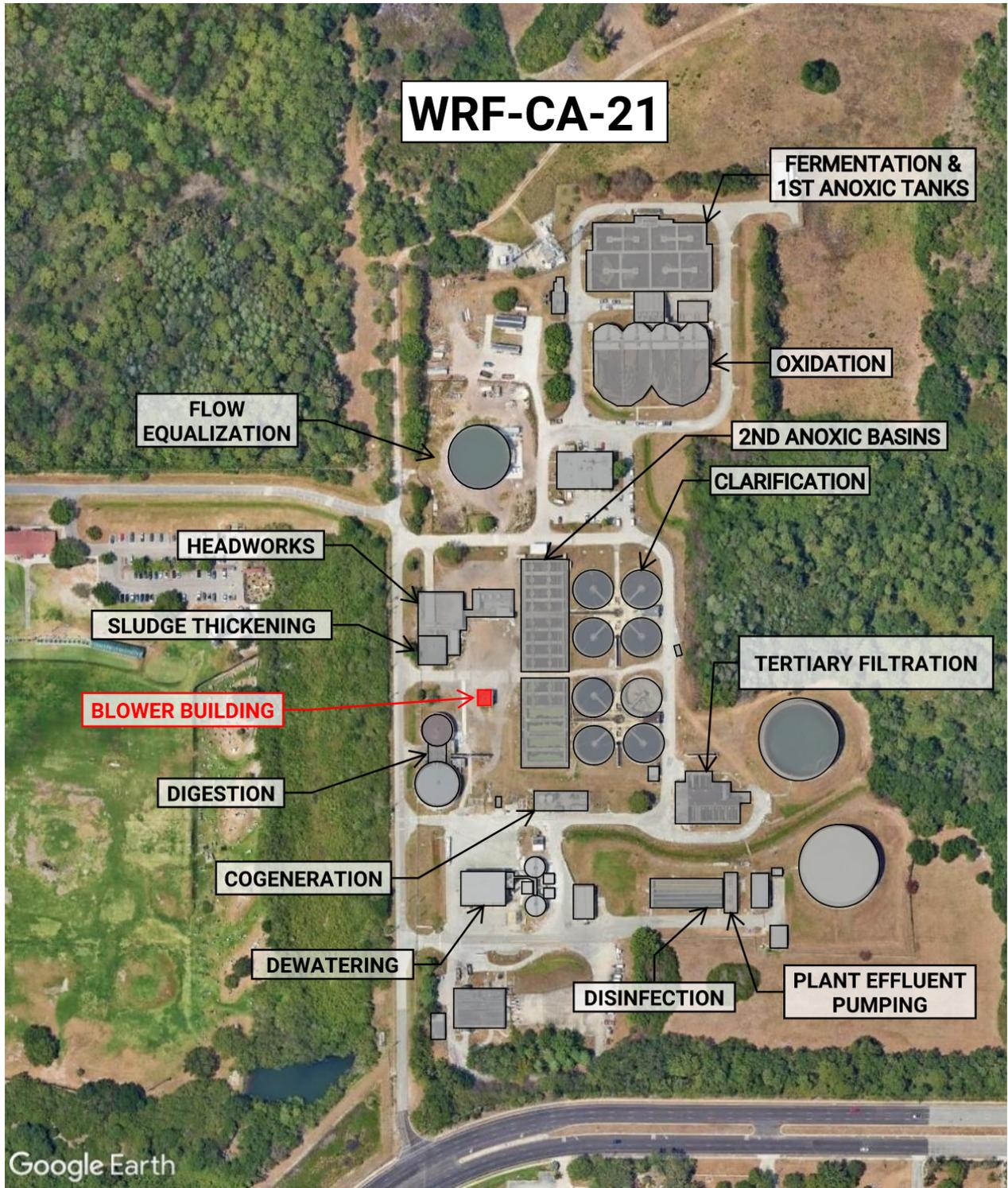
<b>Project Duration</b>	2031 – 2035 (5 Years)	
<b>Project Description</b>	<p><b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b>            Belt Press Generator (ELEC-030, FUEL-005, ELEC-029), Filter Backup Generator (ELEC-009, FUEL-004, ELEC-028), North Twin (FUEL-002, FUEL-003, G1395, G1396), Oxi Bldg Gen (PIPE-001), Gates (GATE-025, GATE-026, GATE-027).</p>	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• ELEC-030/NEWRF-GFS-BP-G: N/A</li> <li>• FUEL-005/NEWRF-GFS-BP-G: N/A</li> <li>• ELEC-029/NEWRF-GFS-BP-G-R: N/A</li> <li>• ELEC-009: 1860 RPM   480 V   8.9 A</li> <li>• FUEL-004/NEWRF-GFS-FB-G: N/A</li> <li>• ELEC-028: N/A</li> <li>• FUEL-002/NEWRF-GFS-NT-FS1: N/A</li> <li>• FUEL-003/NEWRF-GFS-NT-FS2: 2000 gal</li> <li>• G1395/NEWRF-GFS-NT-G1: N/A</li> <li>• G1396/NEWRF-GFS-NT-G2: N/A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$1,600,600
	Scope Contingency Cost (60%)	\$960,400
	Engineering Costs (20%)	\$512,200
	<b>Total Project Cost</b>	<b>\$3,073,200</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>• HEADWORKS SCREENING AND GRIT REMOVAL IMPROVEMENTS FOR THE NORTHEAST, MARSHALL ST, AND EAST ADVANCED POLLUTION CONTROL FACILITIES, 2010, 05-0063-UT</li> <li>• NORTHEAST WRF IMPROVEMENTS PROJECT, 2022, 19-0029-UT</li> <li>• NORTHEAST WASTEWATER TREATMENT FACILITY, 1975</li> </ul>	





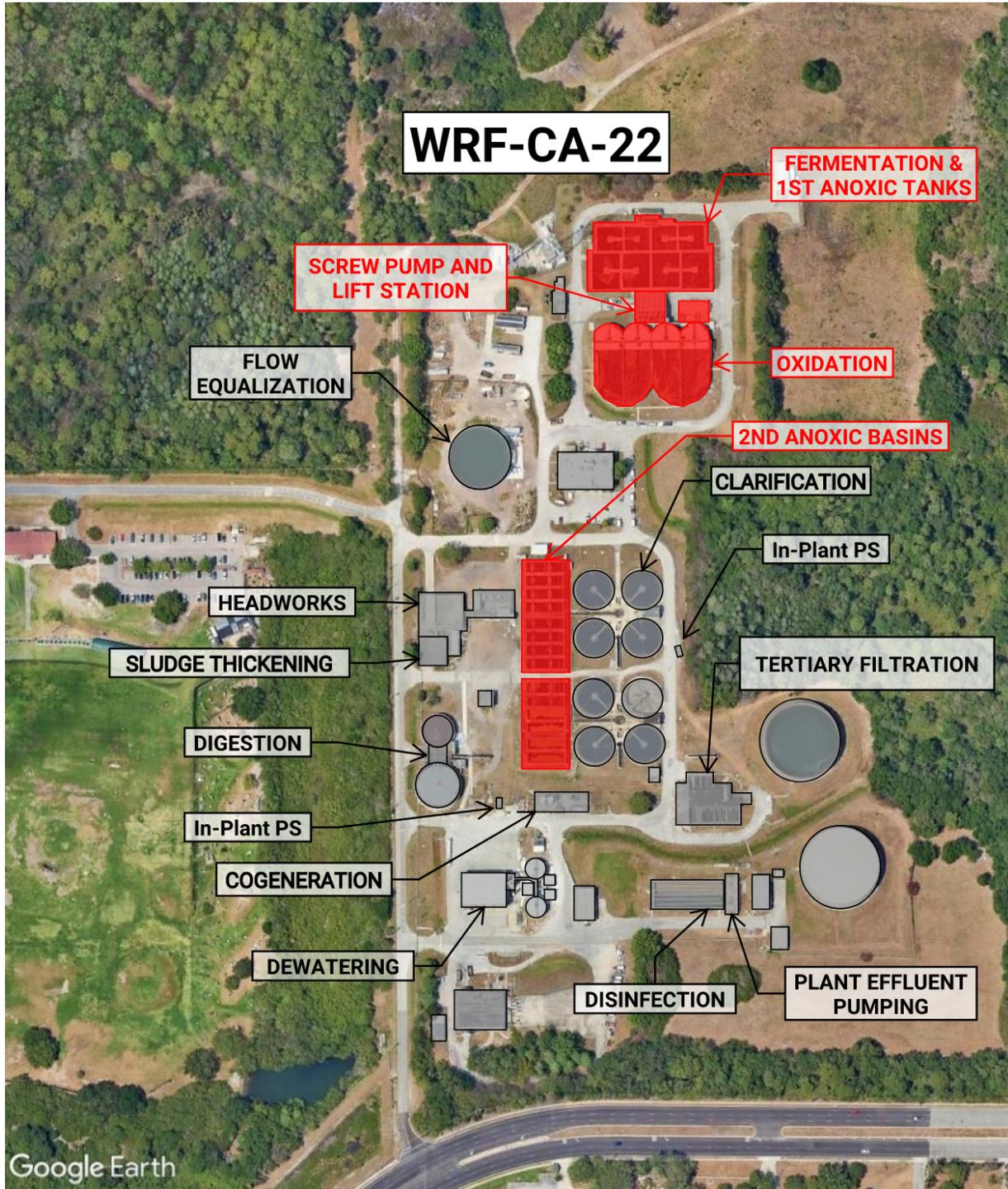
## WRF-CA-21: Blower Building R&R

<b>Project Duration</b>	2036 – 2040 (5 years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Blower Building MCC (MCC-12)	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>MCC-12: 150 HP   3560 RPM   460 V   164 A   724 lb.</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$105,800
	Scope Contingency Cost (60%)	\$63,500
	Engineering Costs (20%)	\$33,900
	<b>Total Project Cost</b>	<b>\$203,200</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>NORTHEAST ADVANCED POLLUTION CONTROL FACILITY CLEARWATER, FLORIDA, 1992, 92016</li> </ul>	



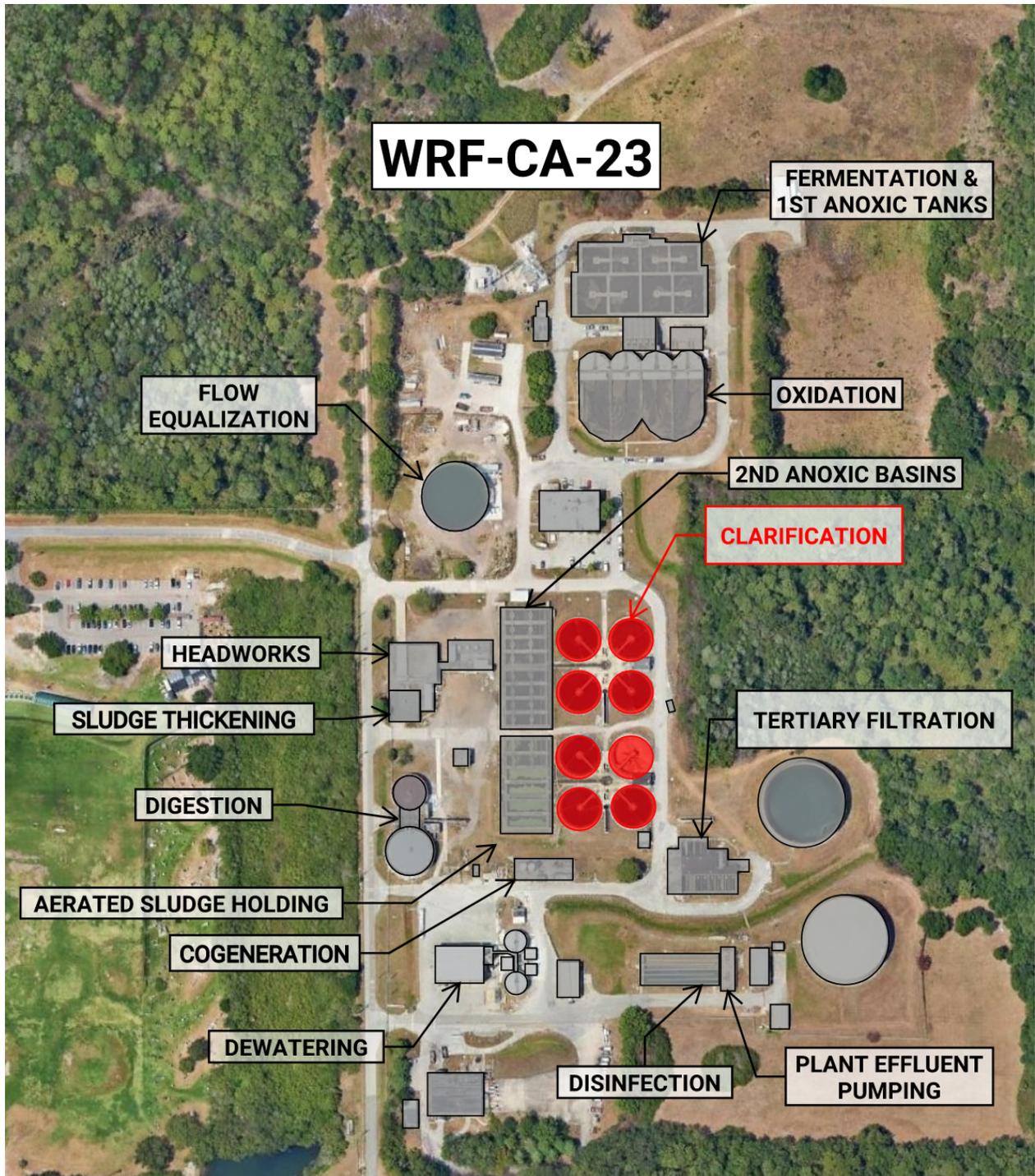
## WRF-CA-22: Secondary Treatment Biological

<b>Project Duration</b>	2036 – 2040 (4 Years)	
<b>Project Description</b>	<p><b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b></p> <p>Fermentation Basins (BSN-002, BSN-001), First Anoxic Tanks (BSN-004, BSN-003), Second Anoxic Tanks (BSN-007, BSN-016, BSN-008, BSN-009, BSN-010, BSN-011, BSN-012, BSN-013, BSN-014, BSN-015), Oxidation Ditch (BSN-006, BSN-005), Screw Pump (GATE-006, GATE-007, GATE-008, GATE-009, STRC-001), East Isolation Gate (GATE-012)</p>	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• BSN-002/NEWRF-BT-AF-FB1: 105' x 50' x 14'</li> <li>• BSN-001/NEWRF-BT-AF-FB1: 105' x 50' x 14'</li> <li>• BSN-004/NEWRF-BT-1SAB-1SAT1: 115.3' x 73' x 14'</li> <li>• BSN-003/NEWRF-BT-1SAB-1SAT2: 115.3' x 73' x 14'</li> <li>• BSN-007/NEWRF-BT-2SAB-2SAT1: 25' x 68' x 15' SWD   190,740 gal</li> <li>• BSN-016/NEWRF-BT-2SAB-2SAT10: 25' x 68' x 15' SWD   190,740 gal</li> <li>• BSN-008/NEWRF-BT-2SAB-2SAT2: 25' x 68' x 15' SWD   190,740 gal</li> <li>• BSN-009/NEWRF-BT-2SAB-2SAT3: 25' x 68' x 15' SWD   190,740 gal</li> <li>• BSN-010/NEWRF-BT-2SAB-2SAT4: 25' x 68' x 15' SWD   190,740 gal</li> <li>• BSN-011/NEWRF-BT-2SAB-2SAT5: 25' x 68' x 15' SWD   190,740 gal</li> <li>• BSN-012/NEWRF-BT-2SAB-2SAT6: 25' x 68' x 15' SWD   190,740 gal</li> <li>• BSN-013/NEWRF-BT-2SAB-2SAT7: 25' x 68' x 15' SWD   190,740 gal</li> <li>• BSN-014/NEWRF-BT-2SAB-2SAT8: 25' x 68' x 15' SWD   190,740 gal</li> <li>• BSN-015/NEWRF-BT-2SAB-2SAT9: 25' x 68' x 15' SWD   190,740 gal</li> <li>• BSN-006/NEWRF-BT-OA-COB-B1W: 1.288 MG</li> <li>• BSN-005/NEWRF-BT-OA-COB-B1W: 1.288 MG</li> <li>• STRC-001: N/A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$9,799,300
	Scope Contingency Cost (60%)	\$5,879,600
	Engineering Costs (20%)	\$3,135,800
	<b>Total Project Cost</b>	<b>\$18,814,700</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>• NORTHEAST ADVANCED POLLUTION CONTROL FACILITY CLEARWATER, FLORIDA, 1992, 92016</li> <li>• NORTHEAST WATER RECLAMATION FACILITY SCREW LIFT STATION UPGRADES, 2015, 12-0017-UT</li> <li>• NORTHEAST WRF MIXER REPLACEMENT, 2012, FIM07</li> </ul>	



## WRF-CA-23: Secondary Treatment Clarifiers R&R

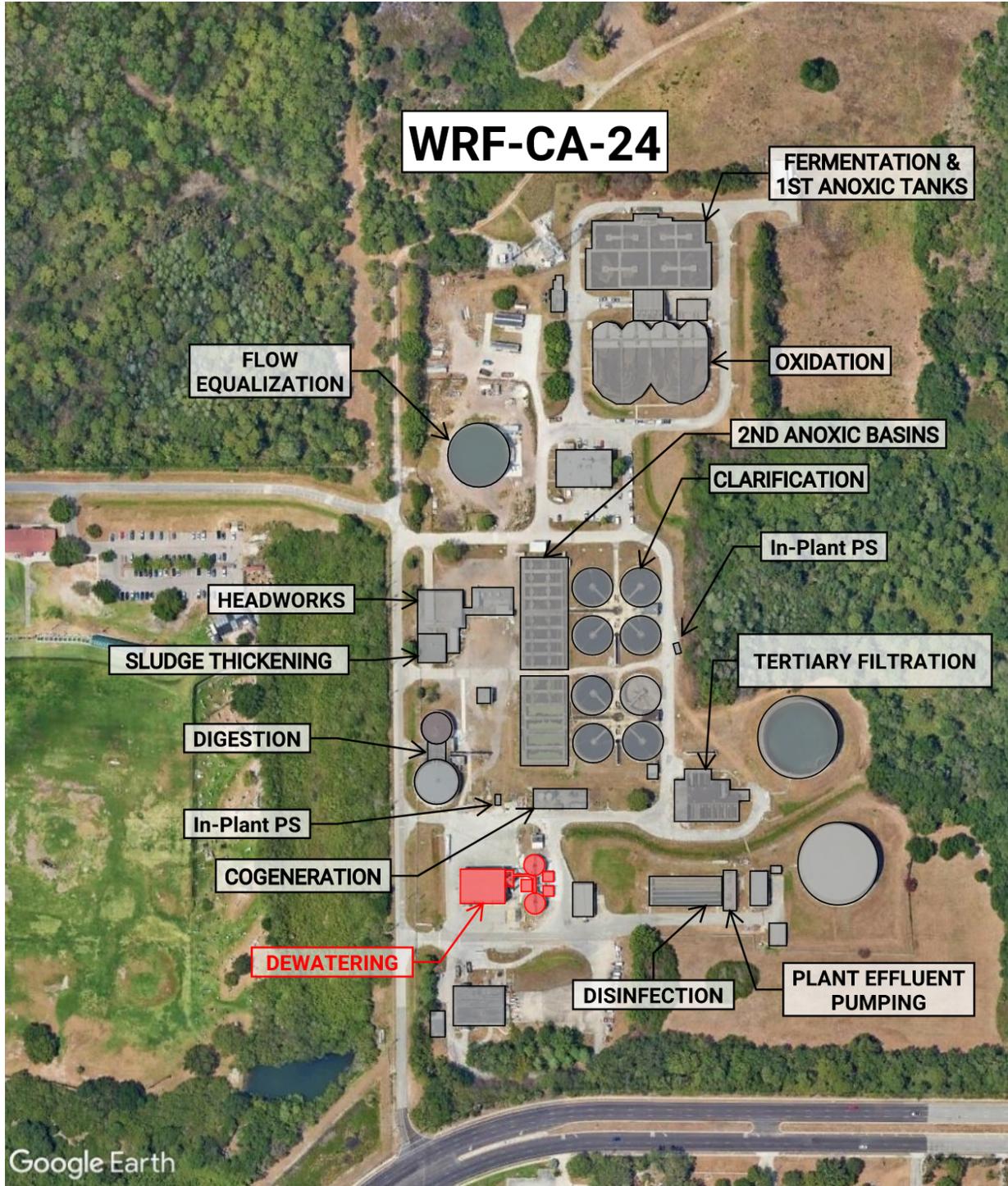
<b>Project Duration</b>	2036 – 2040 (5 Years)	
<b>Project Description</b>	<p><b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b>  North Clarifiers (CLRF-001, CLRF-003, CLRF-004), South Clarifiers (CLRF-005, CLRF-006, CLRF-007, CLRF-008), RAS North Pump House (STRC-003) civil work and building rehabilitation</p>	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• CLRF-001/NEWRF-ST-C-N-C1: 75-FT diameter   336 LF weir   4418 SF surface area</li> <li>• CLRF-003/NEWRF-ST-C-N-C3: 75-FT diameter   336 LF weir   4418 SF surface area</li> <li>• CLRF-004/NEWRF-ST-C-N-C4: 75-FT diameter   336 LF weir   4418 SF surface area</li> <li>• CLRF-005/NEWRF-ST-C-S-C5: 75-FT diameter   336 LF weir   4418 SF surface area</li> <li>• CLRF-006/NEWRF-ST-C-S-C6: 75-FT diameter   336 LF weir   4418 SF surface area</li> <li>• CLRF-007/NEWRF-ST-C-S-C7: 75-FT diameter   336 LF weir   4418 SF surface area</li> <li>• CLRF-008/NEWRF-ST-C-S-C8: 75-FT diameter   336 LF weir   4418 SF surface area</li> <li>• STRC-003: N/A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$2,813,000
	Scope Contingency Cost (60%)	\$1,687,800
	Engineering Costs (20%)	\$900,200
	<b>Total Project Cost</b>	<b>\$5,401,400</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>• NORTHEAST WRF IMPROVEMENTS PROJECT, 2022, 19-0029-UT</li> <li>• CLEARWATER CLARIFIER REHABILITATION, 2010, 12-0025-UT</li> </ul>	





## WRF-CA-24: Dewatering/Solids Handling R&R

<b>Project Duration</b>	2036 – 2040 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Thickening Building – Civil – Structural Components (STRC-021)	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>STRC-021/NEWRF-B-TB-SA: N/A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$705,000
	Scope Contingency Cost (60%)	\$423,000
	Engineering Costs (20%)	\$225,600
	<b>Total Project Cost</b>	<b>\$1,353,600</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>HEADWORKS SCREENING AND GRIT REMOVAL IMPROVEMENTS FOR THE NORTHEAST, MARSHALL ST, AND EAST ADVANCED POLLUTION CONTROL FACILITIES, 2010, 05-0063-UT</li> <li>NORTHEAST WRF IMPROVEMENTS PROJECT, 2022, 19-0029-UT</li> <li>NORTHEAST WASTEWATER TREATMENT FACILITY, 1975</li> </ul>	





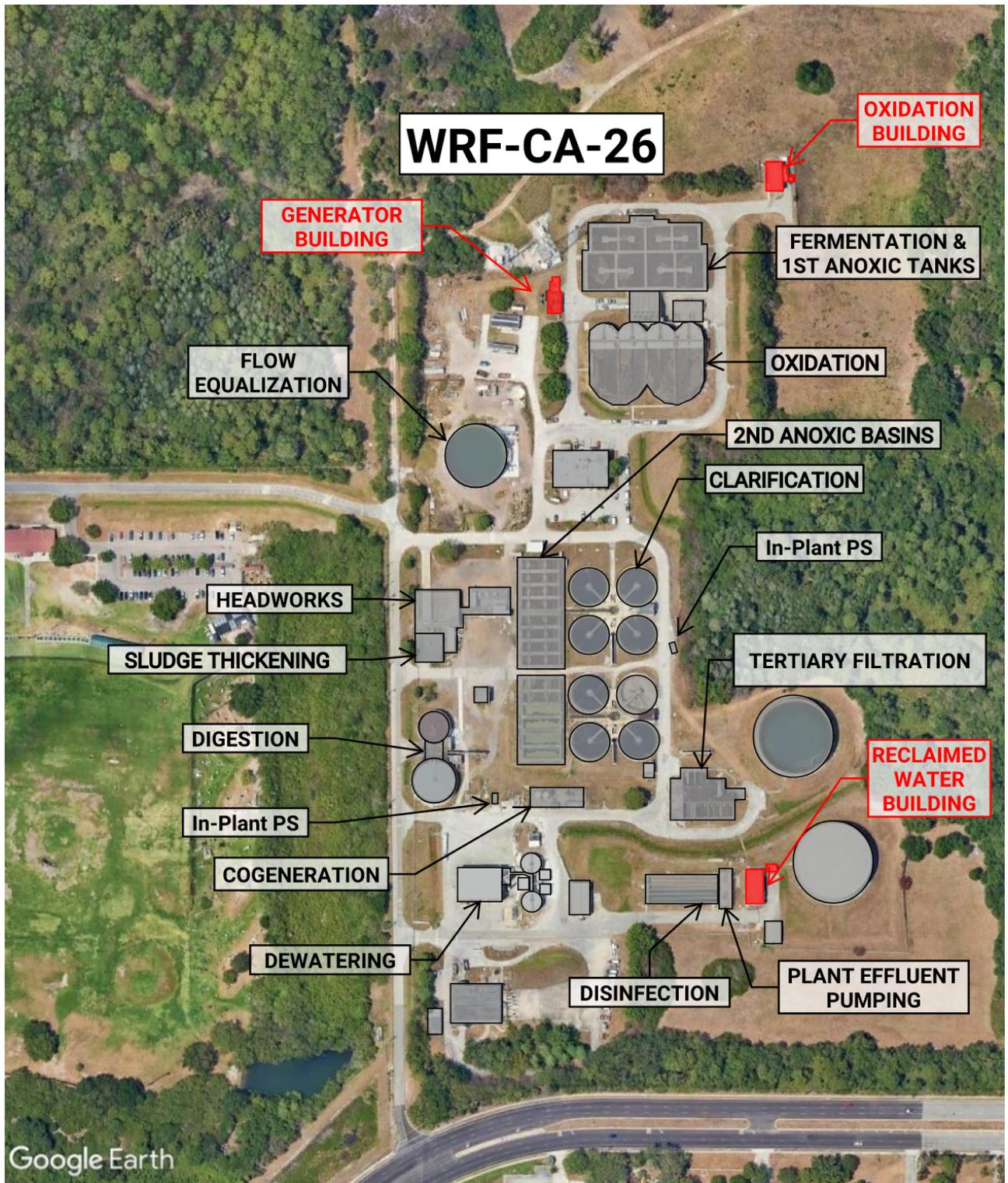
## WRF-CA-25: In-Plant Pump Stations R&R

<b>Project Duration</b>	2036 – 2040 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> In-Plant Pump Station Wet Well (STRC-020)	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>STRC-020: 6-FT DIA</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$230,200
	Scope Contingency Cost (60%)	\$138,100
	Engineering Costs (20%)	\$73,700
	<b>Total Project Cost</b>	<b>\$442,600</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>HEADWORKS SCREENING AND GRIT REMOVAL IMPROVEMENTS FOR THE NORTHEAST, MARSHALL ST, AND EAST ADVANCED POLLUTION CONTROL FACILITIES, 2010, 05-0063-UT</li> <li>NORTHEAST WRF IMPROVEMENTS PROJECT, 2022, 19-0029-UT</li> <li>NORTHEAST WASTEWATER TREATMENT FACILITY, 1975</li> </ul>	



## WRF-CA-26: Generators and Fuel Storage R&R

<b>Project Duration</b>	2036 – 2040 (5 Years)	
<b>Project Description</b>	<p><b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b>            Belt Press Generator (G1398), Filter Backup Generator (G1397), FOG Generator (GFOG), Oxi Bldg Gen (FUEL-001, G1400), Reclaim Water Bldg – Backup Generator (G2954)</p>	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• G1398/NEWRF-GFS-BP-G: N/A</li> <li>• G1397/NEWRF-GFS-FB-G: 1860 RPM   480 V   8.9 A</li> <li>• GFOG/NEWRF-GFS-FOG-G: N/A</li> <li>• FUEL-001/NEWRF-GFS-OB-FS: N/A</li> <li>• G1400/NEWRF-GFS-OB-G: 480 V   600 KW</li> <li>• G2954/NEWRF-GFS-RW-G: 1800 RPM   480 V   1503 A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$4,103,100
	Scope Contingency Cost (60%)	\$2,461,900
	Engineering Costs (20%)	\$1,313,000
	<b>Total Project Cost</b>	<b>\$7,878,000</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>• HEADWORKS SCREENING AND GRIT REMOVAL IMPROVEMENTS FOR THE NORTHEAST, MARSHALL ST, AND EAST ADVANCED POLLUTION CONTROL FACILITIES, 2010, 05-0063-UT</li> <li>• NORTHEAST WRF IMPROVEMENTS PROJECT, 2022, 19-0029-UT</li> <li>• NORTHEAST ADVANCED POLLUTION CONTROL FACILITY CLEARWATER, FLORIDA, 1992, 92016</li> <li>• NORTHEAST WASTEWATER TREATMENT FACILITY, 1975</li> </ul>	



## WRF-CA-27: Maintenance Building R&R

<b>Project Duration</b>	2036 – 2040 (5 Years)	
<b>Project Description</b>	<p><b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b>  Maintenance Building (STRC-026) civil work and building rehabilitation</p>	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>STRC-026/NEWRF-B-ACB-SA1: N/A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$1,972,900
	Scope Contingency Cost (60%)	\$1,183,700
	Engineering Costs (20%)	\$631,300
	<b>Total Project Cost</b>	<b>\$3,787,900</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>HEADWORKS SCREENING AND GRIT REMOVAL IMPROVEMENTS FOR THE NORTHEAST, MARSHALL ST, AND EAST ADVANCED POLLUTION CONTROL FACILITIES, 2010, 05-0063-UT</li> <li>NORTHEAST WRF IMPROVEMENTS PROJECT, 2022, 19-0029-UT</li> <li>NORTHEAST WASTEWATER TREATMENT FACILITY, 1975</li> </ul>	





## WRF-CA-28: Disinfection R&R

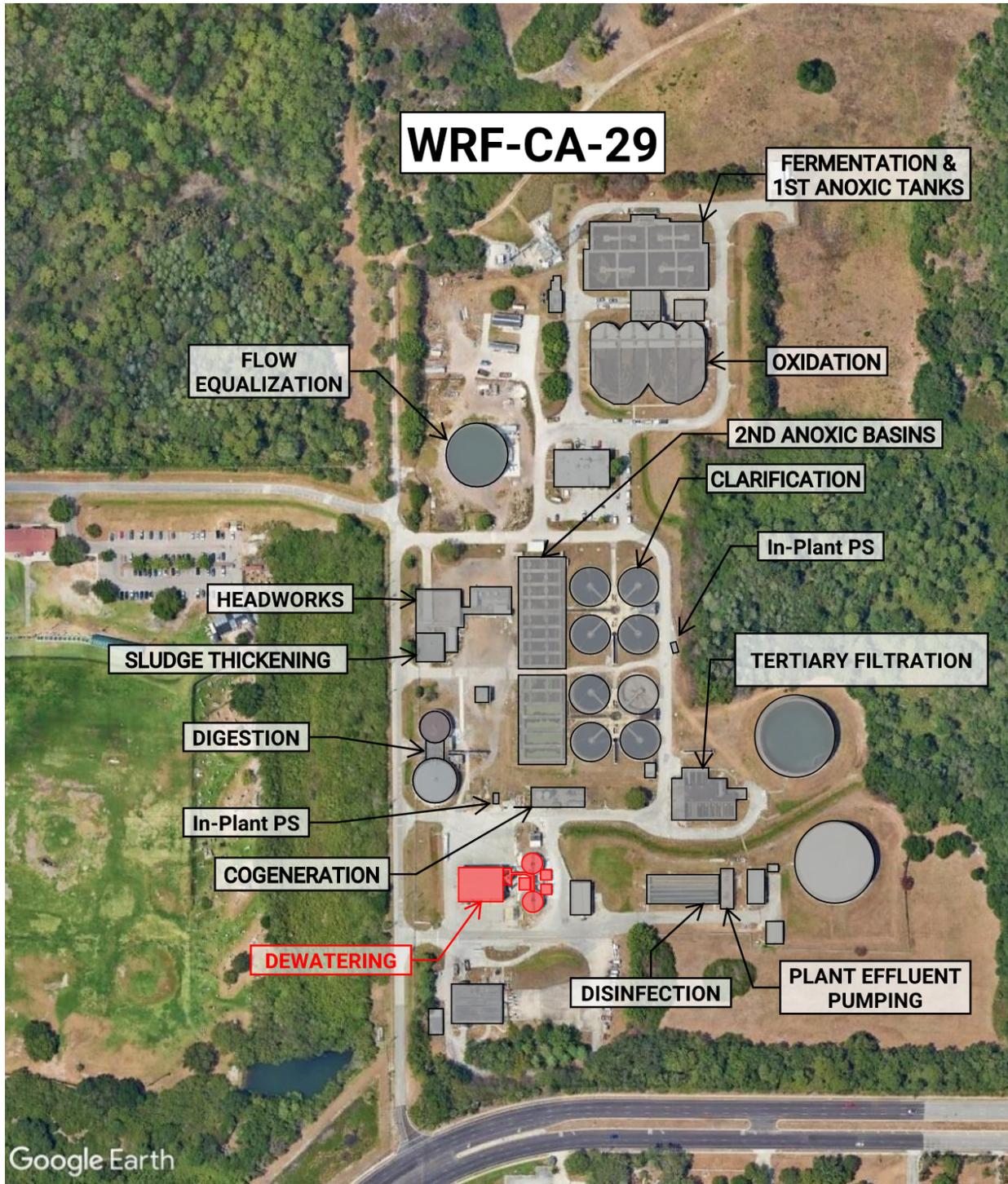
<b>Project Duration</b>	2036 – 2040 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Chlorine Contact Chamber (BSN-018)	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>BSN-018/NEWRF-E-CCC1: N/A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$351,200
	Scope Contingency Cost (60%)	\$210,700
	Engineering Costs (20%)	\$112,400
	<b>Total Project Cost</b>	<b>\$674,300</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>NORTHEAST ADVANCED POLLUTION CONTROL FACILITY IMPROVEMENTS, 2003</li> </ul>	





## WRF-CA-29: Dewatering/Solids Handling R&R

<b>Project Duration</b>	2041 – 2045 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Pumps (PMP-081, PMP-082), Sludge Blending Tank Mixer (MIX-037).	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>• PMP-081: 15 HP   50 GPM</li> <li>• PMP-082: 15 HP   50 GPM</li> <li>• MIX-037/NEWRF-SB-SBT2-MA: 20 HP</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$884,100
	Scope Contingency Cost (60%)	\$530,500
	Engineering Costs (20%)	\$282,900
	<b>Total Project Cost</b>	<b>\$1,697,500</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>• NORTHEAST WRF IMPROVEMENTS PROJECT, 2022, 19-0029-UT</li> <li>• NEWRF SLUDGE THICKENING, 1999</li> </ul>	



## WRF-CA-30: Digestion R&R

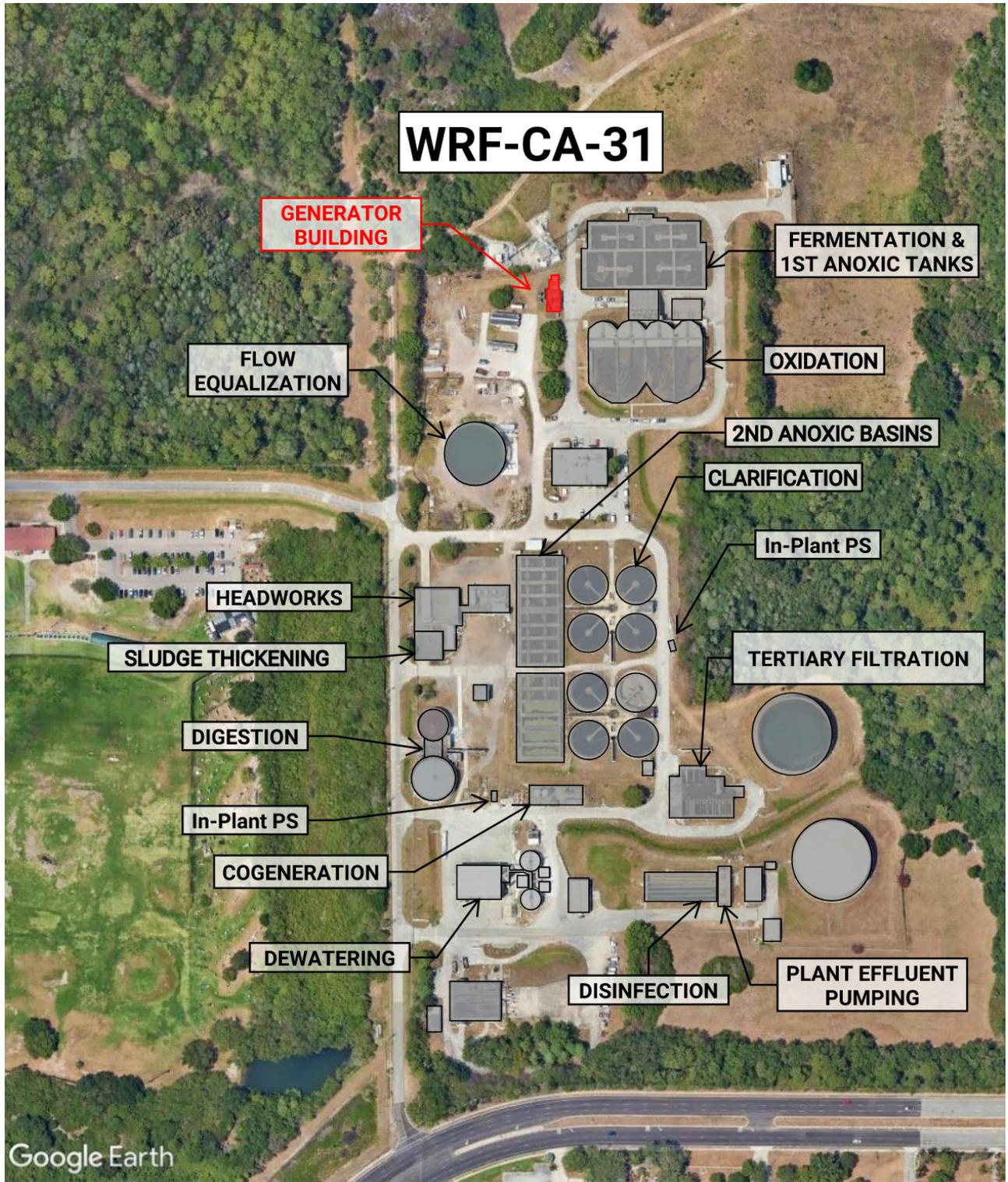
<b>Project Duration</b>	2041 – 2045 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Heat exchanger (HEAT-001)	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>HEAT-001/NEWRF-D-HE-HE: 125 SF   50 PSI</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$282,000
	Scope Contingency Cost (60%)	\$169,200
	Engineering Costs (20%)	\$90,200
	<b>Total Project Cost</b>	<b>\$541,400</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>NEWRF ANAEROBIC DIGESTERS, 1985</li> <li>BIOSOLIDS TREATMENT PROJECT IMPLEMENTATION -DIGESTER REFURBISHMENT - NORTHEAST ADVANCED POLLUTION CONTROL FACILITY, 2004, 03-0022-UT</li> </ul>	





## WRF-CA-31: Generators and Fuel Storage R&R

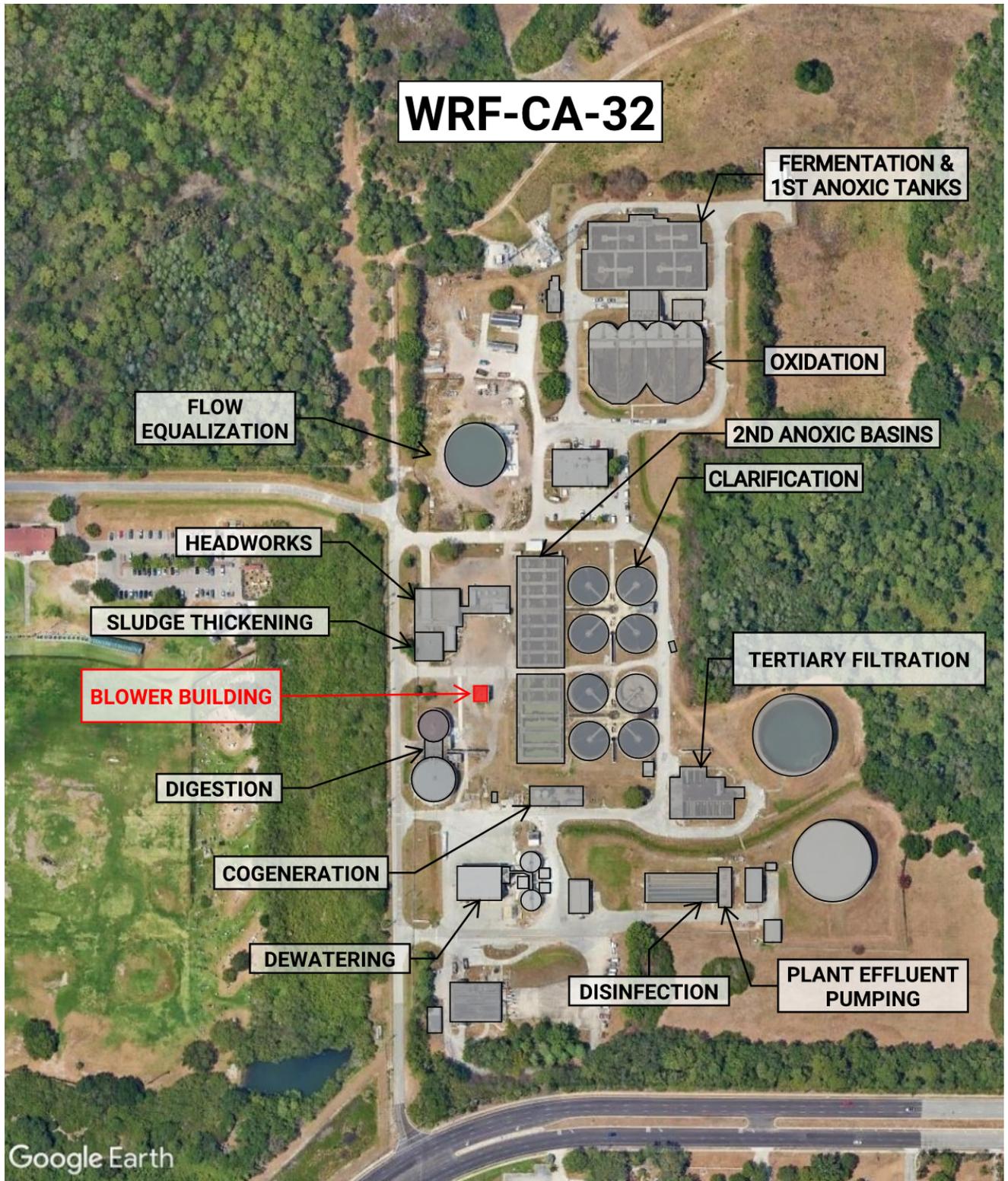
<b>Project Duration</b>	2041 – 2045 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Reclaim Gen – Fuel Storage Tank (FUEL-006)	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>FUEL-006/NEWRF-GFS-RW-FS: 6000 gallons</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$33,900
	Scope Contingency Cost (60%)	\$20,300
	Engineering Costs (20%)	\$10,800
	<b>Total Project Cost</b>	<b>\$65,000</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>NORTHEAST WRF - DIGESTER GAS TO ELECTRICITY COGENERATION FACILITY, 2012, FIM04</li> </ul>	





## WRF-CA-32: Blower Building R&R

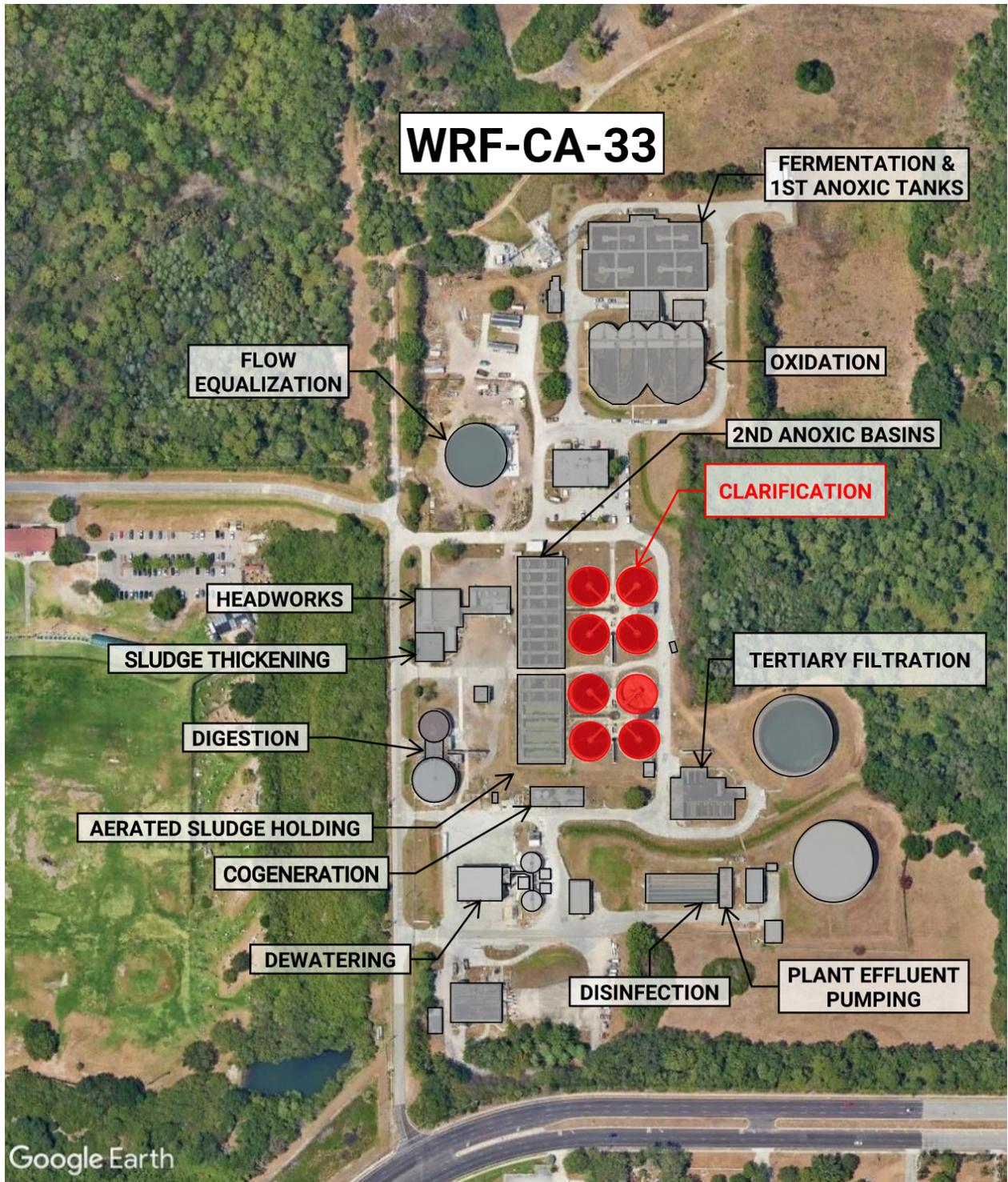
<b>Project Duration</b>	2046 – 2050 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Blower Building (STRC-028) civil work and building rehabilitation	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>STRC-028/NEWRF-B-BB-SA: N/A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$161,300
	Scope Contingency Cost (60%)	\$96,800
	Engineering Costs (20%)	\$51,600
	<b>Total Project Cost</b>	<b>\$309,700</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>NORTHEAST WRF IMPROVEMENTS PROJECT, 2022, 19-0029-UT</li> <li>CLEARWATER CLARIFIER REHABILITATION, 2010, 12-0025-UT</li> </ul>	





## WRF-CA-33: Secondary Treatment Clarifiers R&R

<b>Project Duration</b>	2046 – 2050	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> North Clarifier (CLRF-002), RAS South Pump House (STRC-005) civil work and building rehabilitation	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>CLRF-002: 75-FT diameter   12-FT SWD   336 LF Weir   4418 SF Surface Area</li> <li>STRC-005: N/A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$655,700
	Scope Contingency Cost (60%)	\$393,400
	Engineering Costs (20%)	\$209,800
	<b>Total Project Cost</b>	<b>\$1,258,900</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>NORTHEAST WRF IMPROVEMENTS PROJECT, 2022, 19-0029-UT</li> <li>CLEARWATER CLARIFIER REHABILITATION, 2010, 12-0025-UT</li> </ul>	





## WRF-CA-34: Dewatering/Solids Handling R&R

<b>Project Duration</b>	2046 – 2050 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Dewatering Building (STRC-024) civil work and building rehabilitation	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>STRC-024/NEWRF-B-SDB-SA: N/A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$1,573,500
	Scope Contingency Cost (60%)	\$944,100
	Engineering Costs (20%)	\$503,500
	<b>Total Project Cost</b>	<b>\$3,021,100</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>NORTHEAST ADVANCED POLLUTION CONTROL FACILITY CLEARWATER, FLORIDA, 1992, 92016</li> <li>NEWRF DEWATERING CENTRIFUGE, 2014, FIM03</li> </ul>	



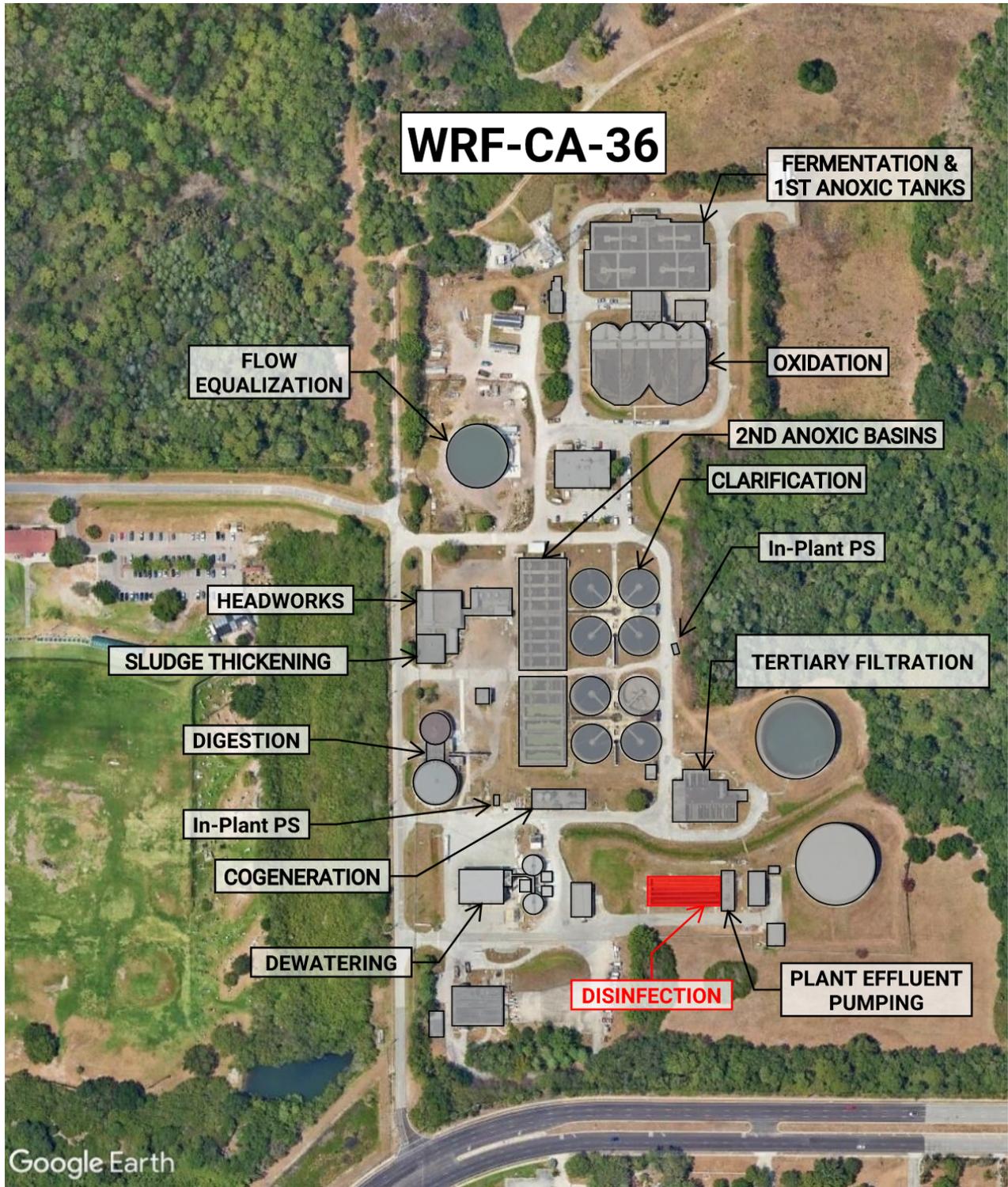
## WRF-CA-35: Digestion R&R

<b>Project Duration</b>	2046 – 2050 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Digester Building (STRC-023) civil work and building rehabilitation	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>STRC-023: N/A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$614,700
	Scope Contingency Cost (60%)	\$368,800
	Engineering Costs (20%)	\$196,700
	<b>Total Project Cost</b>	<b>\$1,180,200</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>NEWRF ANAEROBIC DIGESTERS, 1985</li> <li>BIOSOLIDS TREATMENT PROJECT IMPLEMENTATION -DIGESTER REFURBISHMENT - NORTHEAST ADVANCED POLLUTION CONTROL FACILITY, 2004, 03-0022-UT</li> </ul>	



## WRF-CA-36: Disinfection R&R

<b>Project Duration</b>	2046 – 2050 (5 Years)	
<b>Project Description</b>	<b>Replace the following assets as part of planned removal and replacement (R&amp;R) due to asset end of useful life:</b> Chlorine Contact Chamber (BSN-017)	
<b>Existing Asset Information</b>	<ul style="list-style-type: none"> <li>BSN-017/NEWRF-E-CC2: N/A</li> </ul>	
<b>Project Costs</b>	Total Construction Costs	\$351,200
	Scope Contingency Cost (60%)	\$210,700
	Engineering Costs (20%)	\$112,400
	<b>Total Project Cost</b>	<b>\$674,300</b>
<b>Record Drawing References</b>	<ul style="list-style-type: none"> <li>NORTHEAST ADVANCED POLLUTION CONTROL FACILITY IMPROVEMENTS, 2003</li> </ul>	

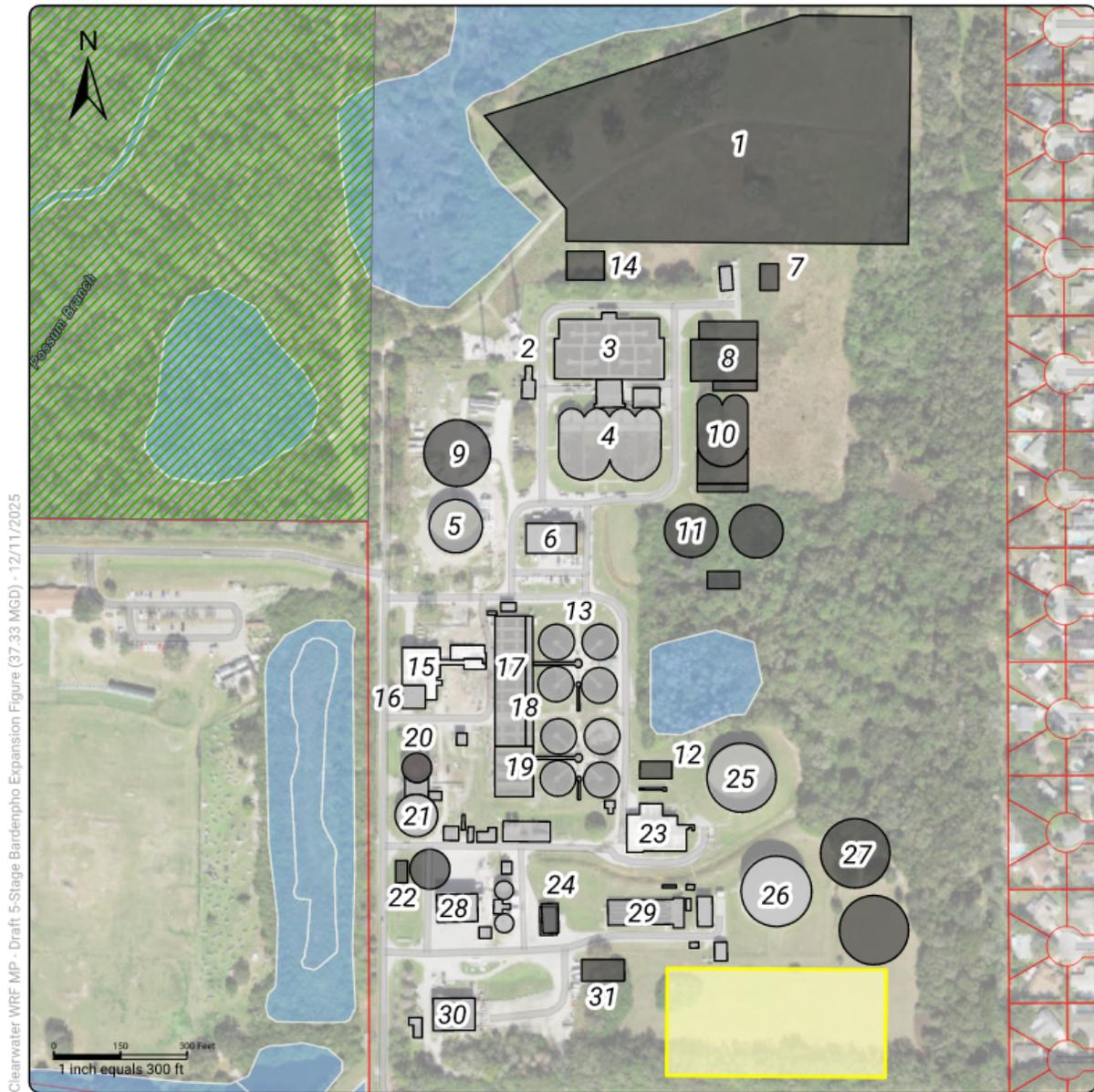


# WRF-EXA3: NEWRF Expansion



<b>Project Duration</b>	<b>2026 – 2032</b>
<b>Project Description</b>	<p><b>The below improvements are a part of the facility expansion utilizing a modified Bardenpho (5-Stage) Carrousel and maximum capacity of 37.33 MGD peak flow:</b></p> <ul style="list-style-type: none"> <li>• New headworks including four mechanically cleaned screens (6 mm opening   21.4 mgd capacity) and grit removal (12 ft diameter   5 tray units   11.25 mgd)</li> <li>• New storm system (32" wide storm water channel   17 ft long storm screen   40 ft x 40 ft. structure for grit removal unit)</li> <li>• Install three (3) Aqua Prime Mega Disk Filters (20 disk units   4,626 gpm capacity each) and associated yard piping</li> <li>• Install one (1) 5-million-gallon CROM tank</li> <li>• Two (2) new 275,000-gallon fermentation tanks</li> <li>• Install Two (2) 2 HP Platform-Mounted Vertical Propeller Mixers</li> <li>• Two (2) new 440,000-gallon 1st anoxic tanks.</li> <li>• Install Two (2) 5 HP Platform-Mounted Vertical Propeller Mixers</li> <li>• Install Four (4) 300 HP dry pit submersible pumps</li> <li>• One (1) new 1,690,000-gallon oxidation ditch</li> <li>• Two (2) new 476,850-gallon 2nd anoxic tanks</li> <li>• Install Two (2) 1 HP Bridge Mounted vertical propeller mixers</li> <li>• One (1) new 154,275 reaeration tank</li> <li>• Two (2) new 120 ft diameter secondary clarifiers</li> <li>• Install Two (2) pneumatic ejectors</li> <li>• Install Two (2) 50 HP centrifugal pumps</li> <li>• Install Two (2) 10 HP progressive cavity pumps</li> <li>• New RAS/WAS Pump House</li> <li>• Install 850 LF RAS Piping (36" DIP)</li> <li>• Install 890 LF WAS Piping from Pump House to WAS Thickener Building (6" DIP)</li> <li>• Three (3) new AquaDisk Cloth Media Filters (12 disk units   5µm pore size)</li> <li>• Install two (2) 4 MGD and four (4) 8 MGD pumps at 35 FT</li> <li>• Install two (2) 5 MGD and two (2) 3.5 MGD pumps at 160 FT</li> <li>• Two (2) new 5-million-gallon reclaimed storage tanks</li> <li>• Install three (3) 17,200-gal sodium hypochlorite tanks</li> <li>• New 90' diameter primary digester concrete tank (1,260,000 gallons)</li> <li>• Install two (2) 2,450 dry lbs/hr centrifuges</li> <li>• Install two (2) 5-million gallon reclaimed water storage tanks</li> </ul>

<b>Project Costs</b>	Total Construction Costs	\$118,085,100
	Scope Contingency Cost (60%)	\$70,851,100
	Engineering Costs (20%)	\$37,787,200
	Easement/Other	\$7,800
	<b>Total Project Cost</b>	<b>\$226,731,200</b>



Clearwater WRF MP - Draft 5-Stage Bardenpho Expansion Figure (37.33 MGD) - 12/11/2025

<p><b>Clearwater WRF Master Plan</b></p> <p><b>Northeast Water Reclamation Facility</b></p> <p>3290 SR 580, Safety Harbor, FL 34695</p> 	<p><b>LEGEND</b></p> <table border="0"> <tr> <td> Clearwater Parks Department</td> <td> Pinellas Parcels</td> <td> NEWRF Existing Infrastructure</td> </tr> <tr> <td> NEWRF Planned Projects</td> <td> FL Wetlands</td> <td> NEWRF Infrastructure to be Removed</td> </tr> <tr> <td></td> <td> NEWRF New Infrastructure</td> <td></td> </tr> </table>		Clearwater Parks Department	Pinellas Parcels	NEWRF Existing Infrastructure	NEWRF Planned Projects	FL Wetlands	NEWRF Infrastructure to be Removed		NEWRF New Infrastructure		<p><b>Alternative No. 3 – 5-Stage Bardenpho Expansion Figure (37.33 MGD Peak)</b></p>																						
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