The Woodlands 10-Year Project Plan

2020-2029

Woodlands Project Summary - Water

San Jacinto River Authority - Woodlands Division

2020 - 2029 Projects

PAGE No.	PROJECT ID	PROJECT NAME	PREVIOUS BUDGET	2020 ESTIMATE	2021 ESTIMATE	2022 ESTIMATE	2023 ESTIMATE	2024 ESTIMATE	2025 ESTIMATE	2026 ESTIMATE	2027 ESTIMATE	2028 ESTIMATE	2029 ESTIMATE	Total
5	WAEST2	Elevated Storage Tank No. 2 Rehabilitation	$ 100,000	$ 1,050,000										$ 1,150,000
6	WAEST1	Elevated Storage Tank No. 1 Rehabilitation		$ 100,000	$ 913,000									$ 1,013,000
7	WAWP5G	Water Plant No. 5 Generator Replacement		$ 300,000										$ 300,000
8	WA20WR	Rehabilitation of Water Well No. 33			$ 330,000									$ 330,000
9	WA21WL	Water Line Renewal			$ 592,000	$ 3,258,000								$ 3,850,000
10	WATCPL	Trade Center Water Line Loop to Harper's Landing					$ 76,000	$ 422,000						$ 498,000
11	WA23WL	Water Line Renewal					$ 1,306,000	$ 3,592,000	$ 3,771,000					$ 8,669,000
12	WA23WR	Rehabilitation of Water Well Nos. 7 & 19					$ 532,000							$ 532,000
13	WA25WL	Water Line Renewal							$ 1,440,000	$ 3,960,000	$ 4,158,000			$ 9,558,000
14	WA25WR	Rehabilitation of Water Well Nos. 9 & 29							$ 587,000					$ 587,000
15	WAET5R	Elevated Storage Tank No. 5 Rehabilitation								$ 1,373,000				$ 1,373,000
16	WA27WL	Water Line Renewal									$ 1,588,000	$ 4,366,000	$ 4,584,000	$ 10,538,000
17	WA27WR	Rehabilitation of Water Well Nos. 5 & 27									$ 647,000			$ 647,000
18	WA2GT1	Water Plant No. 2 Ground Storage Tank No. 1 Replacement									$ 638,000	$ 6,692,000		$ 7,330,000
19	WAET7R	Elevated Storage Tank No. 7 Rehabilitation										$ 1,178,000		$ 1,178,000
20	WAET3R	Elevated Storage Tank No. 3 Rehabilitation											$ 1,771,000	$ 1,771,000
21	WA29WR	Rehabilitation of Water Well Nos. 11 & 35											$ 713,000	$ 713,000
	TOTALS		$ 100,000	$ 1,450,000	$ 1,835,000	$ 3,258,000	$ 1,914,000	$ 4,014,000	$ 5,798,000	$ 5,333,000	$ 7,031,000	$ 12,236,000	$ 7,068,000	$ 50,037,000

Woodlands Project Summary - Wastewater

San Jacinto River Authority - Woodlands Division

2020 - 2029 Projects

PAGE No.	PROJECT ID	PROJECT NAME	PREVIOUS BUDGET	2020 ESTIMATE	2021 ESTIMATE	2022 ESTIMATE	2023 ESTIMATE	2024 ESTIMATE	2025 ESTIMATE	2026 ESTIMATE	2027 ESTIMATE	2028 ESTIMATE	2029 ESTIMATE	Total
22	WWFM5R	Lift Station No. 5 Force Main Replacement	$ 3,510,000	$ 1,100,000										$ 4,610,000
23	WW2MCC	WWTF No. 2 Plant Process Water MCC	$ 64,000	$ 350,000										$ 414,000
24	WWSSES	Sanitary Sewer Transmission Assessment & Renewal (SSTAR) Program	$ 502,000	$ 1,300,000										$ 1,802,000
25	WW19LS	Lift Station No. 13 Rehabilitation	$ 266,000		$ 2,200,000									$ 2,466,000
26	WWERSC	Emergency Repair Service Center		$ 500,000										$ 500,000
27	WW02FR	WWTF No. 2 Tertiary Filter Improvements (2nd Filter)			$ 1,500,000	$ 2,000,000								$ 3,500,000
28	WW21GR	Gravity Main Rehabilitation				$ 1,030,000	$ 2,834,000	$ 2,976,000						$ 6,840,000
29	WW22FM	Forcemain Renewal - LS Nos. 7 and 11				$ 230,000	$ 1,267,000							$ 1,497,000
30	WW22LS	Lift Stations No. 1 and No. 8 Rehabilitation				$ 184,000	$ 1,007,000							$ 1,191,000
31	WW01CR	WWTF No. 1 Clarifier Rehabilitation				$ 336,000	$ 1,847,000							$ 2,183,000
32	WW23GR	Gravity Main Rehabilitation					$ 498,000	$ 2,742,000						$ 3,240,000
33	WW23FM	Forcemain Renewal - LS Nos. 8, 9, 10, & 21					$ 990,000	$ 5,443,000						$ 6,433,000
34	WWF1LS	WWTF No. 1 Rehabilitation of Lift Stations						$ 554,000	$ 3,044,000					$ 3,598,000
35	WW02LS	WWTF No. 2 Lift Station Pumping Improvements						$ 758,000	$ 4,170,000					$ 4,928,000
36	WW24FM	Forcemain Renewal - LS Nos. 1, 13, 14, & 19						$ 586,000	$ 3,220,000					$ 3,806,000
37	WW24LS	Lift Stations No. 2 and No. 19 Rehabilitation						$ 151,000	$ 1,109,000					$ 1,260,000
38	WW24GR	Gravity Main Rehabilitation						$ 1,130,000	$ 6,216,000					$ 7,346,000
39	WW2SCR	WWTF No. 2 Belt Press and Conveyor Replacement						$ 396,000	$ 2,176,000					$ 2,572,000
40	WWF3PW	WWTF No. 3 PPW Pressure System Improvements						$ 60,000	$ 333,000					$ 393,000
41	WW01CL	WWTF No. 1 Addition of 4th Clarifier							$ 1,284,000	$ 7,061,000				$ 8,345,000
42	WW01DS	WWTF No. 1 Disinfection System Improvements							$ 2,332,000	$ 12,829,000				$ 15,161,000
43	WWLS24	Lift Station 24B Expansion and Force Main Replacement								$ 1,826,000	$ 10,042,000			$ 11,868,000
44	WWGL24	Enlargement of Lift Station 24 Gravity Line								$ 1,494,000	$ 8,218,000			$ 9,712,000
45	WWLS07	Lift Station No. 7 Expansion								$ 130,000	$ 711,000			$ 841,000
46	WWF1GN	WWTF No. 1 Generator Replacement								$ 118,000	$ 1,298,000			$ 1,416,000
47	WW26LS	Lift Station No. 25 Rehabilitation								$ 662,000	$ 3,641,000			$ 4,303,000
48	WWLSRB	Lift Station Rehabilitation									$ 645,000	$ 676,000	$ 710,000	$ 2,031,000
49	WWLS06	Lift Station No. 6 Expansion									$ 122,000	$ 672,000		$ 794,000
50	WW27GR	Gravity Main Rehabilitation									$ 1,828,000	$ 10,056,200		$ 11,884,200
51	WW02CL	WWTF No. 2 Clarifier No. 4 Addition									$ 844,000	$ 4,638,000		$ 5,482,000
52	WWLS02	Lift Station No. 2 Expansion									$ 96,000	$ 526,000		$ 622,000
53	WWLS03	Lift Station No. 3 Expansion									$ 66,000	$ 367,000		$ 433,000
54	WWLS08	Lift Station No. 8 Expansion									$ 64,000	$ 354,000		$ 418,000
55	WW02F3	WWTF No. 2 Tertiary Filter Improvements (3rd Filter)									$ 656,000	$ 3,605,000		$ 4,261,000
56	WW1D1R	WWTF No. 1 Digester 1 Replacement										$ 420,000	$ 2,311,000	$ 2,731,000
	TOTALS		$ 4,973,000	$ 3,250,000	$ 3,700,000	$ 3,780,000	$ 8,443,000	$ 14,796,000	$ 23,884,000	$ 24,120,000	$ 28,231,000	$ 21,314,200	$ 3,021,000	$ 139,512,200

Woodlands Project Summary - TWDB Bond Fund

San Jacinto River Authority - Woodlands Division

2020 - 2029 Projects

PAGE No.	PROJECT ID	PROJECT NAME	PREVIOUS BUDGET	2020 ESTIMATE	2021 ESTIMATE	2022 ESTIMATE	2023 ESTIMATE	2024 ESTIMATE	2025 ESTIMATE	2026 ESTIMATE	2027 ESTIMATE	2028 ESTIMATE	2029 ESTIMATE	Total
57	WWF1AB	WWTF No. 1 Replacement of Aeration Basin Nos. 1 and 2 *	$ 1,191,000	$ 10,395,000										$ 11,586,000
	TOTALS		$ 1,191,000	$ 10,395,000										$ 11,586,000

* WWF1AB (TWDB Bond Fund) and WW1AB (Capacity, 6th & Final Accounting, $2,037,000) projects are combined.

Woodlands Project Summary - Capacity

San Jacinto River Authority - Woodlands Division

2020 - 2029 Projects

PAGE No.	PROJECT ID	PROJECT NAME	PREVIOUS BUDGET	2020 ESTIMATE	2021 ESTIMATE	2022 ESTIMATE	2023 ESTIMATE	2024 ESTIMATE	2025 ESTIMATE	2026 ESTIMATE	2027 ESTIMATE	2028 ESTIMATE	2029 ESTIMATE	Total
58	WWF1AB	WWTF No. 1 Replacement of Aeration Basin Nos. 1 and 2	$ 117,000	$ 1,920,000										$ 2,037,000
59	WA4GT2	Water Plant No. 4 Ground Storage Tank No. 2	$ 620,000	$ 3,413,000										$ 4,033,000
	TOTALS		$ 737,000	$ 5,333,000										$ 6,070,000

* WW1AB (Capacity, 6th & Final Accounting) and WWF1AB (TWDB Bond Fund, $11,586,000) projects are combined.

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Elevated Storage Tank No. 2 Rehabilitation	WAEST2	2019 - 2020	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Elevated Storage Tank No. 2 is a 1,000,000 gallon tank and was constructed in 1982. Based on the Dunham Engineering report completed in 2013, the tank was recoated approximately 15 years ago, and the coating is deteriorating and has reached the end of its useful life. It is recommended to replace the interior and exterior coating systems and perform minor vent and pipe work. A follow-up inspection will be completed in 2019 to verify the rehabilitation work identified in 2013 inspection is still appropriate, or if additional repairs will be necessary.

To protect the metal structure from corrosion and to extend the useful life of the tank, periodic protective coating system replacement is required. Interior coating systems meet their protective value in about 12-15 years and require system replacement in order to continue to provide adequate corrosion protection. The useful life of an exterior coating can be 10-12 years depending on the type of paint and thickness applied.

This project is part of a phased asset management approach to continuously rehabilitate elevated storage tanks in the system, to ensure that all the tanks are rehabilitated to maintain reliability and structural integrity over the next 10 years. Other projects as described in WAEST1, WAET5R, and WAET7R will accomplish the goal of keeping the tanks reliable and structurally sound.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	December 2018	☐ DBB	☐ O&M
PSA/WO Issued:	February 2019	☐ CMAR	☐ Bonds
Final Proposal Docs:	July 2019	☑ CSP	☑ R&R
Proposals/Bids Received:	August 2019	☐ Other	☐ Other
Const. Contract to Board:	October 2019		
Substantial Completion:	May 2020	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 50,000	$ 50,000										
Engineering/Design	$ 50,000	$ 50,000										
Construction	$ 950,000		$ 950,000									
CPS, CM&I, and CMT	$ 100,000		$ 100,000									
Land Acquisition												
Equipment Purchase												
Total	**$ 1,150,000**	**$ 100,000**	**$ 1,050,000**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Elevated Storage Tank No. 1 Rehabilitation	WAEST1	2020 - 2021	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Elevated Storage Tank No. 1 is a 500,000 gallon tank and was constructed in 1977. Based on the Dunham Engineering report completed in 2013, it is recommended to completely replace the interior and exterior coating systems. A follow-up inspection will be completed in 2019 to verify the rehabilitation work identified in the 2013 inspection is still appropriate, or if additional repairs will be necessary.

To protect the metal structure from corrosion and to extend the useful life of the tank, periodic protective coating system replacement is required. Interior coating systems meet their protective value in about 12-15 years and require system replacement in order to continue to provide adequate corrosion protection. The useful life of an exterior coating can be 10-12 years depending on the type of paint and thickness applied.

This project is part of a phased asset management approach to continuously rehabilitate elevated storage tanks in the system, to ensure that all the tanks are rehabilitated to maintain reliability and structural integrity over the next 10 years. Other projects as described in WAEST2, WAET5R, and WAET7R will accomplish the goal of keeping the tanks reliable and structurally sound.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	August 2019	☐ DBB	☐ O&M
PSA/WO Issued:	October 2019	☐ CMAR	☐ Bonds
Final Proposal Docs:	April 2020	☑ CSP	☑ R&R
Proposals/Bids Received:	July 2020	☐ Other	☐ Other
Const. Contract to Board:	October 2020		
Substantial Completion:	March 2021	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 50,000		$ 50,000									
Engineering/Design	$ 50,000		$ 50,000									
Construction	$ 830,000			$ 830,000								
CPS, CM&I, and CMT	$ 83,000			$ 83,000								
Land Acquisition												
Equipment Purchase												
Total	**$ 1,013,000**	**$ -**	**$ 100,000**	**$ 913,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Water Plant No. 5 Generator Replacement	WAWP5G	2020	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The 880 kW natural gas standby generator at Water Plant No. 5 was installed in 2006. In the past two years, the generator has experience numerous mechanic issues and experienced a mechanical failure which rendered the unit inoperable. The cost to repair this generator and the unknown future reliability resulted in the need for the generator to be replaced. The proposed generator will be 750 kW and be fueled by diesel.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	N/A	☑ DBB	☐ O&M
PSA/WO Issued:	N/A	☐ CMAR	☐ Bonds
Final Proposal Docs:	N/A	☐ CSP	☑ R&R
Proposals/Bids Received:	January 2020	☐ Other	☐ Other
Const. Contract to Board:	March 2020		
Substantial Completion:	June 2020	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ -											
Engineering/Design	$ -											
Construction	$ 50,000		$ 50,000									
CPS, CM&I, and CMT	$ -											
Land Acquisition	$ -											
Equipment Purchase	$ 250,000		$ 250,000									
Total	**$ 300,000**	**$ -**	**$ 300,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

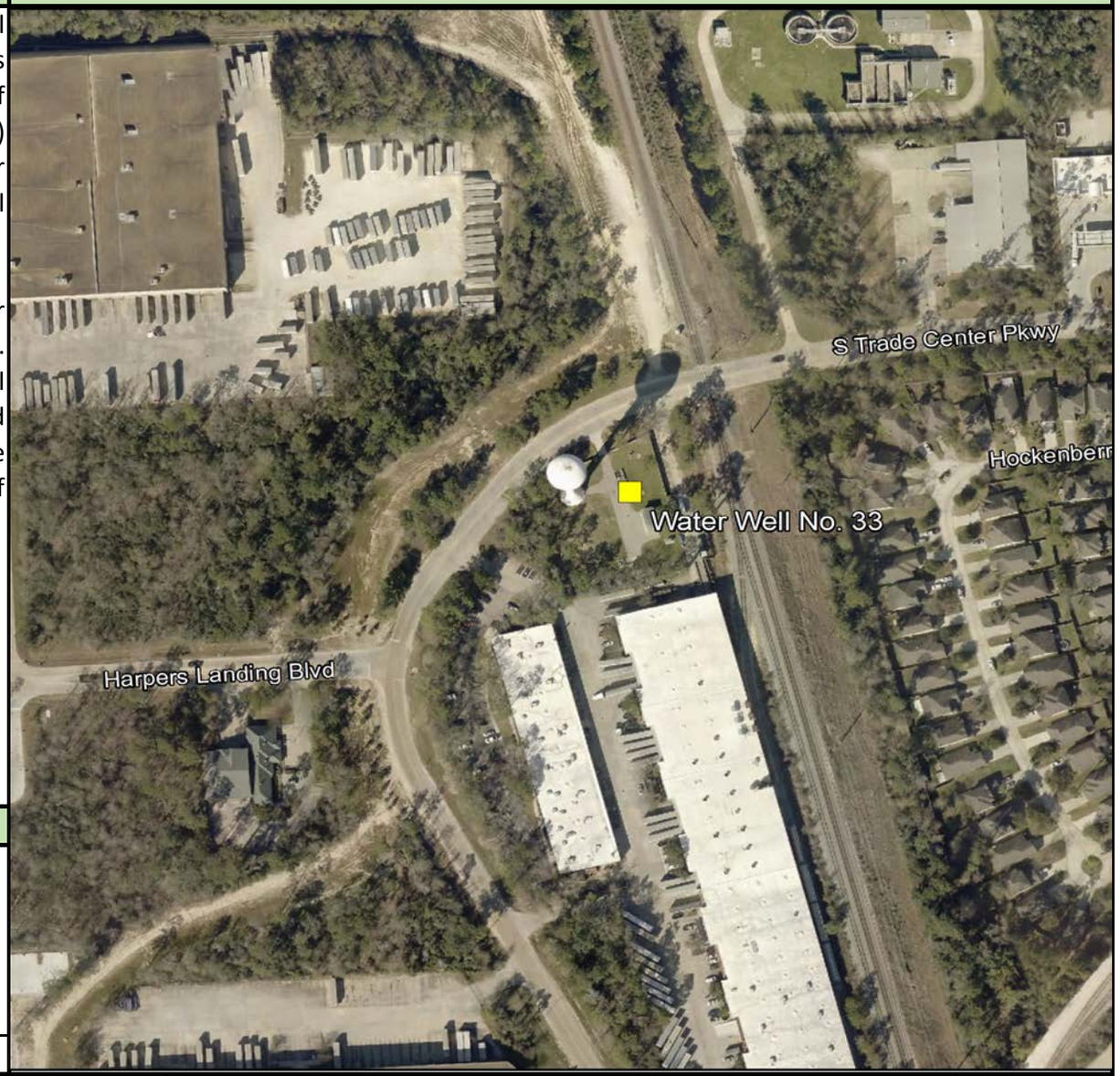
PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Rehabilitation of Water Well No. 33	WA20WR	2021	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The Woodlands began receiving treated surface water in 2015, however, peak water demands will continue to be met by existing ground water wells. Consequently, continued well rehabilitation is necessary in order to prolong service life, minimize risk of failure and reduce annual maintenance of the wells. SJRA completes a semi-annual inspection of each water well to determine which well(s) may require rehabilitation. The targeted well(s) are then compared to the long term water production needs to meet the needs of The Woodlands and are then evaluated based on the well retirement plan for either rehabilitation or abandonment.

Based upon an evaluation of the 38 water wells, Well No. 33 is anticipated to have the need for rehabilitation based upon date of last previous rehabilitation and production capabilities. Rehabilitation of Well No. 33 will include removing, inspecting, and possibly replacing pump and well equipment; performing well video survey(s); wire brushing the well screen section; jetting out and removing fill material from the bottom of the well; and performing acid chemical treatment of the well screen sections. Rehabilitation may also include adding gravel pack material to the well if needed.

PROJECT MAP/PICTURE



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2021	☐ DBB	☐ O&M
PSA/WO Issued:	2021	☐ CMAR	☐ Bonds
Final Proposal Docs:	2021	☑ CSP	☑ R&R
Proposals/Bids Received:	2021	☐ Other	☐ Other
Const. Contract to Board:	2021		
Substantial Completion:	2022	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER												
Engineering/Design	$ 14,000			$ 14,000								
Construction	$ 287,000			$ 287,000								
CPS, CM&I, and CMT	$ 29,000			$ 29,000								
Land Acquisition												
Equipment Purchase												
Total	**$ 330,000**	$ -	$ -	**$ 330,000**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Water Line Renewal	WA21WL	2021 - 2022	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The SJRA owns and maintains approximately 120 miles of potable water distribution lines 12-inches and larger diameter in the Woodlands. The existing distribution system contains 47 miles of asbestos cement (AC) lines. Approximately 20 miles of all water lines are more than 40 years old, and the majority of which are made of AC material. Regional best asset management practices suggest that AC water lines have the higher frequency of failure, and average useful life of 45 years. Historically, SJRA has experienced on average 4 failures per year.

Due to the aging water distribution infrastructure and increasing rate of breaks, water line renewal is necessary to reduce the risk of failure or leakage, decrease repair frequencies, lessen the risk of property damage, and improve reliability.

This project is part of a phased asset management approach to continuously replace old AC water lines in the system, to ensure that all the AC lines are replaced within the next 20 years. Other projects as described in WA23WL, WA25WL, and WA27WL will accomplish the goal of replacing all of the AC pipe in the system. The AC lines will be replaced with PVC or HDPE lines with an average expected useful life of more than 80 years. This project includes replacing approximately two (2) miles of AC pipelines throughout the Woodlands.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2021	☐ DBB	☐ O&M
PSA/WO Issued:	2021	☐ CMAR	☐ Bonds
Final Proposal Docs:	2021	☑ CSP	☑ R&R
Proposals/Bids Received:	2022	☐ Other	☐ Other
Const. Contract to Board:	2022		
Substantial Completion:	2023	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 296,000			$ 296,000								
Engineering/Design	$ 296,000			$ 296,000								
Construction	$ 2,962,000				$ 2,962,000							
CPS, CM&I, and CMT	$ 296,000				$ 296,000							
Land Acquisition												
Equipment Purchase												
Total	**$ 3,850,000**	**$ -**	**$ -**	**$ 592,000**	**$ 3,258,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Trade Center Water Line Loop to Harper's Landing	WATCPL	2023-2024	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The Village of Harper's Landing is located north of SH 242 and east of IH-45, and currently is served with potable water pumped from SJRA Water Plant No. 5, located on the west side of IH-45. Between the Trade Center Parkway/Harper's Landing Blvd. intersection and Elevated Storage Tank No. 7 (EST 7), only one water line exists that delivers the water to this neighborhood. In the event of the need for shut-down of this water line, Harper's Landing would have no source of potable water.

A 12-inch water line is proposed to be installed along Trade Center Parkway between Harper's Landing and EST 7, a distance of approximately 470 linear feet. This will complete the loop to the system which will provide another source of potable water to Harper's Landing. Due to multiple utilities in this area, and to minimize disturbance to the route, trenchless installation is proposed for construction.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2023	☐ DBB	☐ O&M
PSA/WO Issued:	2023	☐ CMAR	☐ Bonds
Final Proposal Docs:	2023	☑ CSP	☑ R&R
Proposals/Bids Received:	2024	☐ Other	☐ Other
Const. Contract to Board:	2024		
Substantial Completion:	2024	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 38,000					$ 38,000						
Engineering/Design	$ 38,000					$ 38,000						
Construction	$ 384,000						$ 384,000					
CPS, CM&I, and CMT	$ 38,000						$ 38,000					
Land Acquisition												
Equipment Purchase												
Total	**$ 498,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 76,000**	**$ 422,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Water Line Renewal	WA23WL	2023-2025	Woodlands

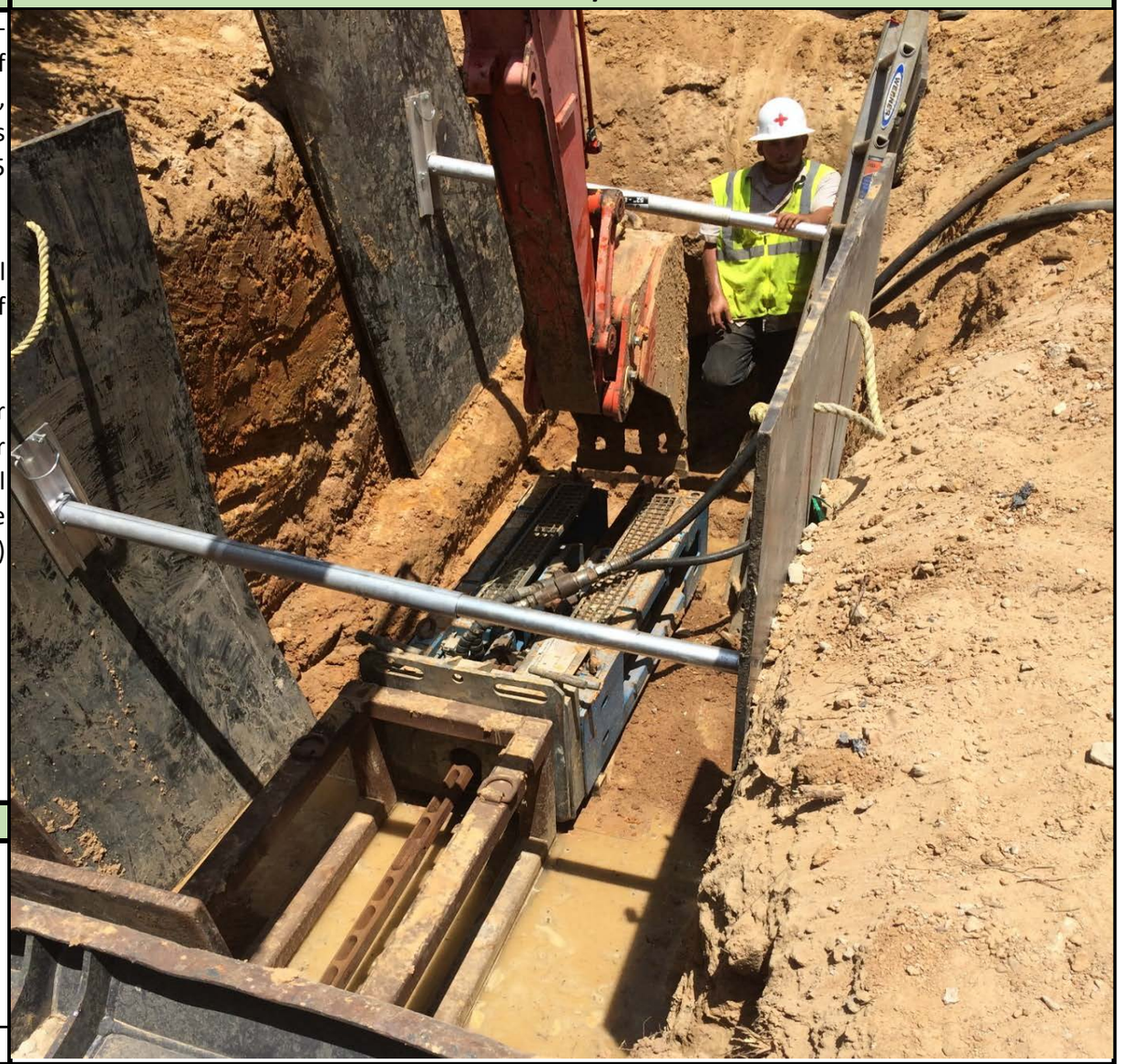
PROJECT DESCRIPTION/JUSTIFICATION:

The SJRA owns and maintains approximately 120 miles of potable water distribution lines 12-inches and larger diameter in the Woodlands. The existing distribution system contains 47 miles of asbestos cement (AC) lines. Approximately 20 miles of all water lines are more than 40 years old, and the majority of which are made of AC material. Regional best asset management practices suggest that AC water lines have the higher frequency of failure, and average useful life of 45 years. Historically, SJRA has experienced on average 4 failures per year.

Due to the aging water distribution infrastructure and increasing rate of breaks, water line renewal is necessary to reduce the risk of failure or leakage, decrease repair frequencies, lessen the risk of property damage, and improve reliability.

This project is part of a phased asset management approach to continuously replace old AC water lines in the system, to ensure that all the AC lines are replaced within the next 20 years. Other projects as described in WA21WL, WA25WL, and WA27WL will accomplish the goal of replacing all of the AC pipe in the system. The AC lines will be replaced with PVC or HDPE lines with an average expected useful life of more than 80 years. This project includes replacing approximately four (4) miles of AC pipelines throughout the Woodlands.

PROJECT MAP/PICTURE



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2023	☐ DBB	☐ O&M
PSA/WO Issued:	2023	☐ CMAR	☐ Bonds
Final Proposal Docs:	2023	☑ CSP	☑ R&R
Proposals/Bids Received:	2024	☐ Other	☐ Other
Const. Contract to Board:	2024		
Substantial Completion:	2025	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 653,000					$ 653,000						
Engineering/Design	$ 653,000					$ 653,000						
Construction	$ 6,693,000						$ 3,265,000	$ 3,428,000				
CPS, CM&I, and CMT	$ 670,000						$ 327,000	$ 343,000				
Land Acquisition												
Equipment Purchase												
Total	**$ 8,669,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,306,000**	**$ 3,592,000**	**$ 3,771,000**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

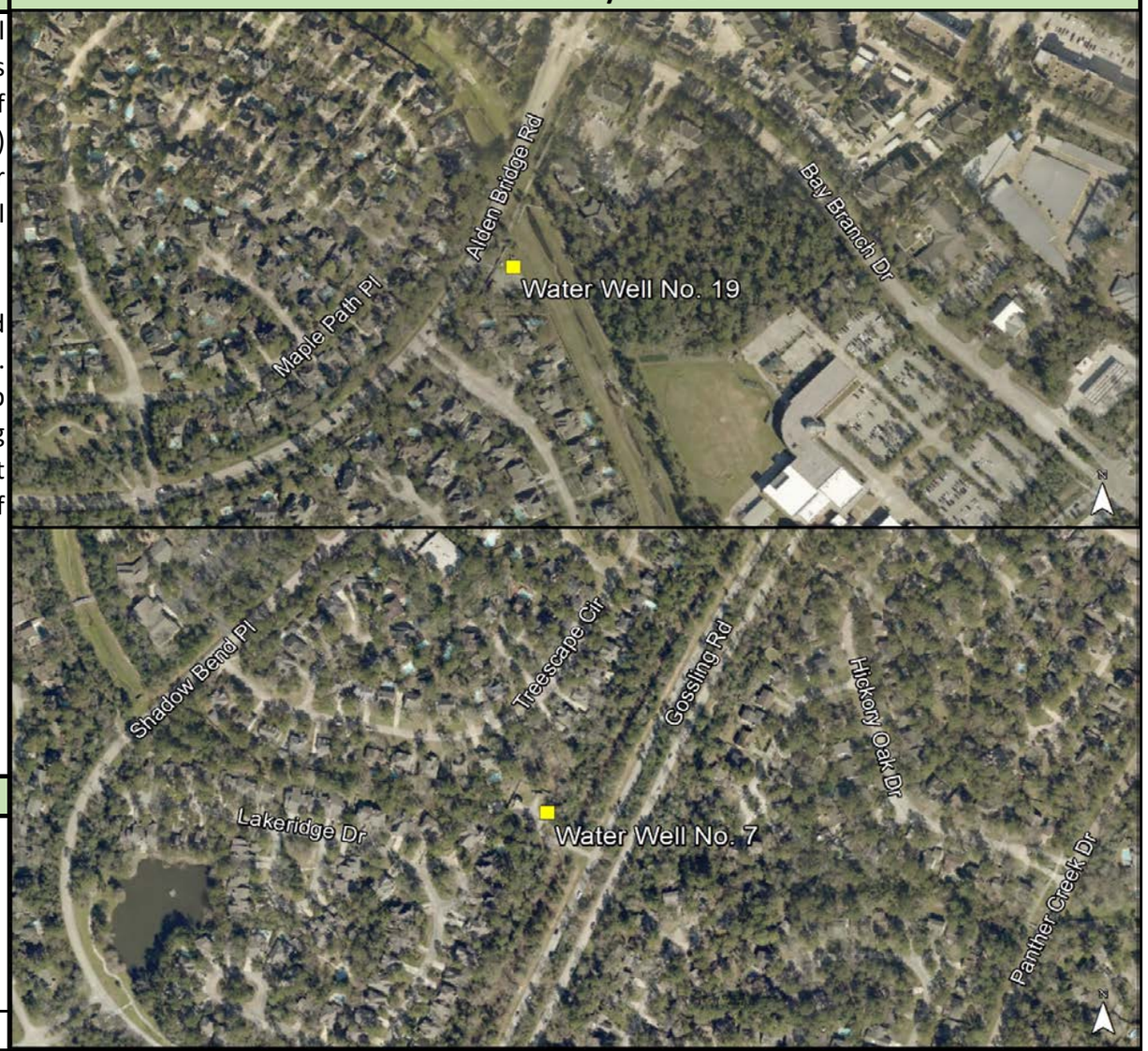
PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Rehabilitation of Water Well Nos. 7 & 19	WA23WR	2023	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The Woodlands began receiving treated surface water in 2015, however, peak water demands will continue to be met by existing ground water wells. Consequently, continued well rehabilitation is necessary in order to prolong service life, minimize risk of failure and reduce annual maintenance of the wells. SJRA completes a semi-annual inspection of each water well to determine which well(s) may require rehabilitation. The targeted well(s) are then compared to the long term water production needs to meet the needs of The Woodlands and are then evaluated based on the well retirement plan for either rehabilitation or abandonment.

Based upon an evaluation of the 38 water wells, Well Nos. 7 and 19 are anticipated to have the need for rehabilitation based upon date of last previous rehabilitation and production capabilities. Rehabilitation of Well Nos. 7 and 19 will include removing, inspecting, and possibly replacing pump and well equipment; performing well video survey(s); wire brushing the well screen section; jetting out and removing fill material from the bottom of the well; and performing acid chemical treatment of the well screen sections. Rehabilitation may also include adding gravel pack material to the well if needed.

PROJECT MAP/PICTURE



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2023	☐ DBB	☐ O&M
PSA/WO Issued:	2023	☐ CMAR	☐ Bonds
Final Proposal Docs:	2023	☑ CSP	☑ R&R
Proposals/Bids Received:	2023	☐ Other	☐ Other
Const. Contract to Board:	2023		
Substantial Completion:	2024	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER												
Engineering/Design	$ 23,000					$ 23,000						
Construction	$ 463,000					$ 463,000						
CPS, CM&I, and CMT	$ 46,000					$ 46,000						
Land Acquisition												
Equipment Purchase												
Total	**$ 532,000**	$ -	$ -	$ -	$ -	**$ 532,000**	$ -	$ -	$ -	$ -	$ -	$ -

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Water Line Renewal	WA25WL	2025-2027	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The SJRA owns and maintains approximately 120 miles of potable water distribution lines 12-inches and larger diameter in the Woodlands. The existing distribution system contains 47 miles of asbestos cement (AC) lines. Approximately 20 miles of all water lines are more than 40 years old, and the majority of which are made of AC material. Regional best asset management practices suggest that AC water lines have the higher frequency of failure, and average useful life of 45 years. Historically, SJRA has experienced on average 4 failures per year.

Due to the aging water distribution infrastructure and increasing rate of breaks, water line renewal is necessary to reduce the risk of failure or leakage, decrease repair frequencies, lessen the risk of property damage, and improve reliability.

This project is part of a phased asset management approach to continuously replace old AC water lines in the system, to ensure that all the AC lines are replaced within the next 20 years. Other projects as described in WA21WL, WA23WL, and WA27WL will accomplish the goal of replacing all of the AC pipe in the system. The AC lines will be replaced with PVC or HDPE lines with an average expected useful life of more than 80 years. This project includes replacing approximately four (4) miles of AC pipelines throughout the Woodlands.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2025	☐ DBB	☐ O&M
PSA/WO Issued:	2025	☐ CMAR	☐ Bonds
Final Proposal Docs:	2025	☑ CSP	☑ R&R
Proposals/Bids Received:	2026	☐ Other	☐ Other
Const. Contract to Board:	2026		
Substantial Completion:	2027	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 720,000							$ 720,000				
Engineering/Design	$ 720,000							$ 720,000				
Construction	$ 7,380,000								$ 3,600,000	$ 3,780,000		
CPS, CM&I, and CMT	$ 738,000								$ 360,000	$ 378,000		
Land Acquisition												
Equipment Purchase												
Total	**$ 9,558,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,440,000**	**$ 3,960,000**	**$ 4,158,000**	**$ -**	**$ -**

* Budget includes contingency

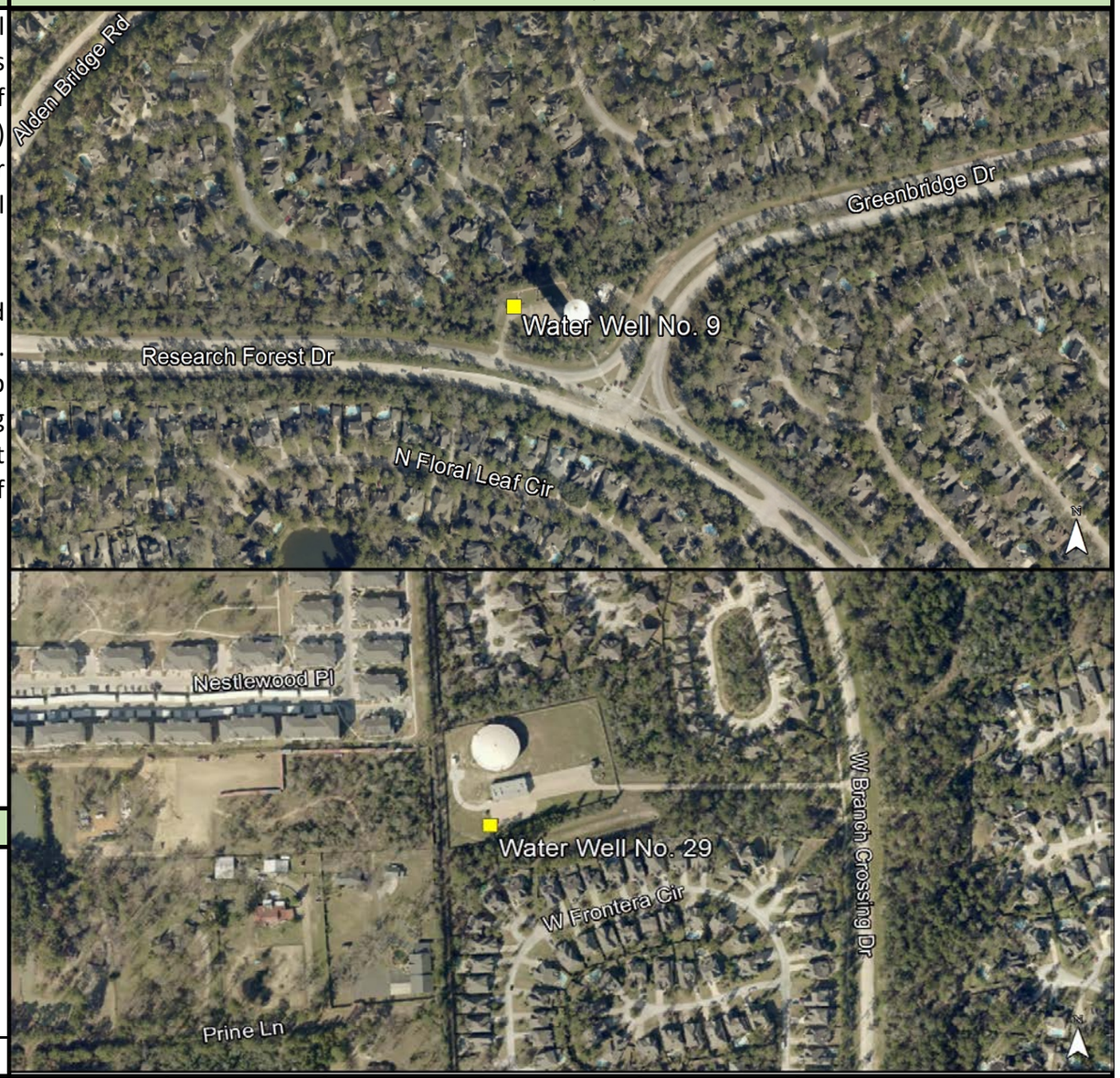
PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Rehabilitation of Water Well Nos. 9 & 29	WA25WR	2025	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The Woodlands began receiving treated surface water in 2015, however, peak water demands will continue to be met by existing ground water wells. Consequently, continued well rehabilitation is necessary in order to prolong service life, minimize risk of failure and reduce annual maintenance of the wells. SJRA completes a semi-annual inspection of each water well to determine which well(s) may require rehabilitation. The targeted well(s) are then compared to the long term water production needs to meet the needs of The Woodlands and are then evaluated based on the well retirement plan for either rehabilitation or abandonment.

Based upon an evaluation of the 38 water wells, Well Nos. 9 and 29 are anticipated to have the need for rehabilitation based upon date of last previous rehabilitation and production capabilities. Rehabilitation of Well Nos. 9 and 29 will include removing, inspecting, and possibly replacing pump and well equipment; performing well video survey(s); wire brushing the well screen section; jetting out and removing fill material from the bottom of the well; and performing acid chemical treatment of the well screen sections. Rehabilitation may also include adding gravel pack material to the well if needed.

PROJECT MAP/PICTURE



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2025	☐ DBB	☐ O&M
PSA/WO Issued:	2025	☐ CMAR	☐ Bonds
Final Proposal Docs:	2025	☑ CSP	☑ R&R
Proposals/Bids Received:	2025	☐ Other	☐ Other
Const. Contract to Board:	2025		
Substantial Completion:	2026	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER												
Engineering/Design	$ 26,000							$ 26,000				
Construction	$ 510,000							$ 510,000				
CPS, CM&I, and CMT	$ 51,000							$ 51,000				
Land Acquisition												
Equipment Purchase												
Total	**$ 587,000**	$ -	$ -	$ -	$ -	$ -	$ -	**$ 587,000**	$ -	$ -	$ -	$ -

* Budget includes contingency

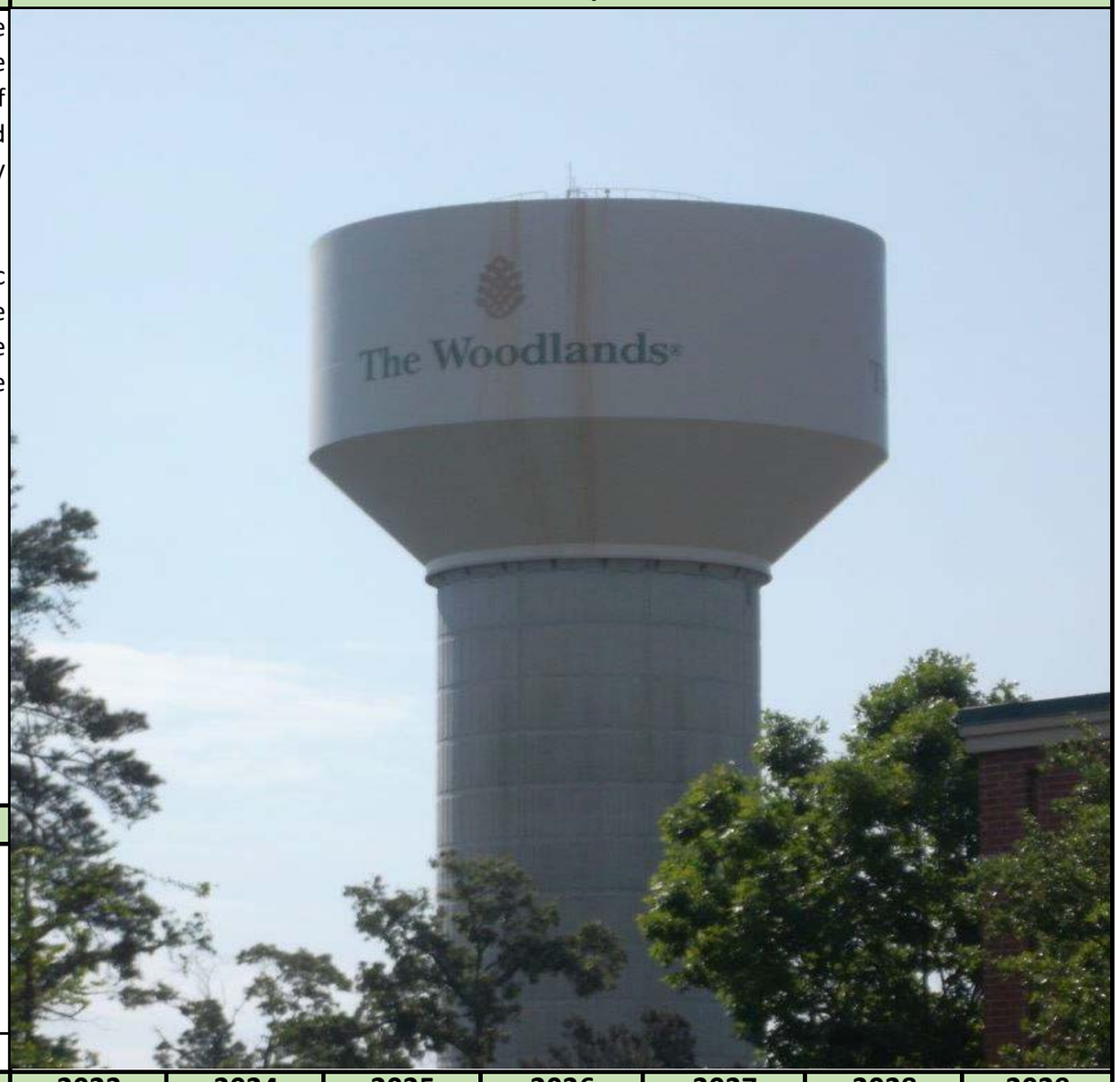
PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Elevated Storage Tank No. 5 Rehabilitation	WAET5R	2026	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Elevated Storage Tank No. 5 is a 1,000,000 gallon tank and was constructed in 2000. Based on the Dunham Engineering report completed in 2013, the exterior and interior coating systems were replaced in 2015 per the engineer's recommendation. This project (2024) will include recoating of the tank exterior and interior surfaces for maintenance and to continue to protect the exterior and interior from corrosion. An inspection of the tank will be completed in 2024 to identify any additional rehabilitation work.

To protect the metal structure from corrosion and to extend the useful life of the tank, periodic protective coating system replacement is required. Interior coating systems meet their protective value in about 12-15 years and require system replacement in order to continue to provide adequate corrosion protection. The useful life of an exterior coating can be 10-12 years depending on the type of paint and thickness applied.

PROJECT MAP/PICTURE



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2026	☐ DBB	☐ O&M
PSA/WO Issued:	2026	☐ CMAR	☐ Bonds
Final Proposal Docs:	2026	☑ CSP	☑ R&R
Proposals/Bids Received:	2026	☐ Other	☐ Other
Const. Contract to Board:	2026		
Substantial Completion:	2027	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 106,000								$ 106,000	$ -		
Engineering/Design	$ 106,000								$ 106,000	$ -		
Construction	$ 1,055,000								$ 1,055,000	$ -		
CPS, CM&I, and CMT	$ 106,000								$ 106,000	$ -		
Land Acquisition												
Equipment Purchase												
Total	**$ 1,373,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,373,000**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Water Line Renewal	WA27WL	2027-2029	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The SJRA owns and maintains approximately 120 miles of potable water distribution lines 12-inches and larger diameter in the Woodlands. The existing distribution system contains 47 miles of asbestos cement (AC) lines. Approximately 20 miles of all water lines are more than 40 years old, and the majority of which are made of AC material. Regional best asset management practices suggest that AC water lines have the higher frequency of failure, and average useful life of 45 years. Historically, SJRA has experienced on average 4 failures per year.

Due to the aging water distribution infrastructure and increasing rate of breaks, water line renewal is necessary to reduce the risk of failure or leakage, decrease repair frequencies, lessen the risk of property damage, and improve reliability.

This project is part of a phased asset management approach to continuously replace old AC water lines in the system, to ensure that all the AC lines are replaced within the next 20 years. Other projects as described in WA21WL, WA23WL, and WA25WL will accomplish the goal of replacing all of the AC pipe in the system. The AC lines will be replaced with PVC or HDPE lines with an average expected useful life of more than 80 years. This project includes replacing approximately four (4) miles of AC pipelines throughout the Woodlands.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2027	☐ DBB	☐ O&M
PSA/WO Issued:	2027	☐ CMAR	☐ Bonds
Final Proposal Docs:	2027	☑ CSP	☑ R&R
Proposals/Bids Received:	2028	☐ Other	☐ Other
Const. Contract to Board:	2028		
Substantial Completion:	2030	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 794,000									$ 794,000		
Engineering/Design	$ 794,000									$ 794,000		
Construction	$ 8,136,000										$ 3,969,000	$ 4,167,000
CPS, CM&I, and CMT	$ 814,000										$ 397,000	$ 417,000
Land Acquisition												
Equipment Purchase												
Total	**$ 10,538,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,588,000**	**$ 4,366,000**	**$ 4,584,000**

* Budget includes contingency

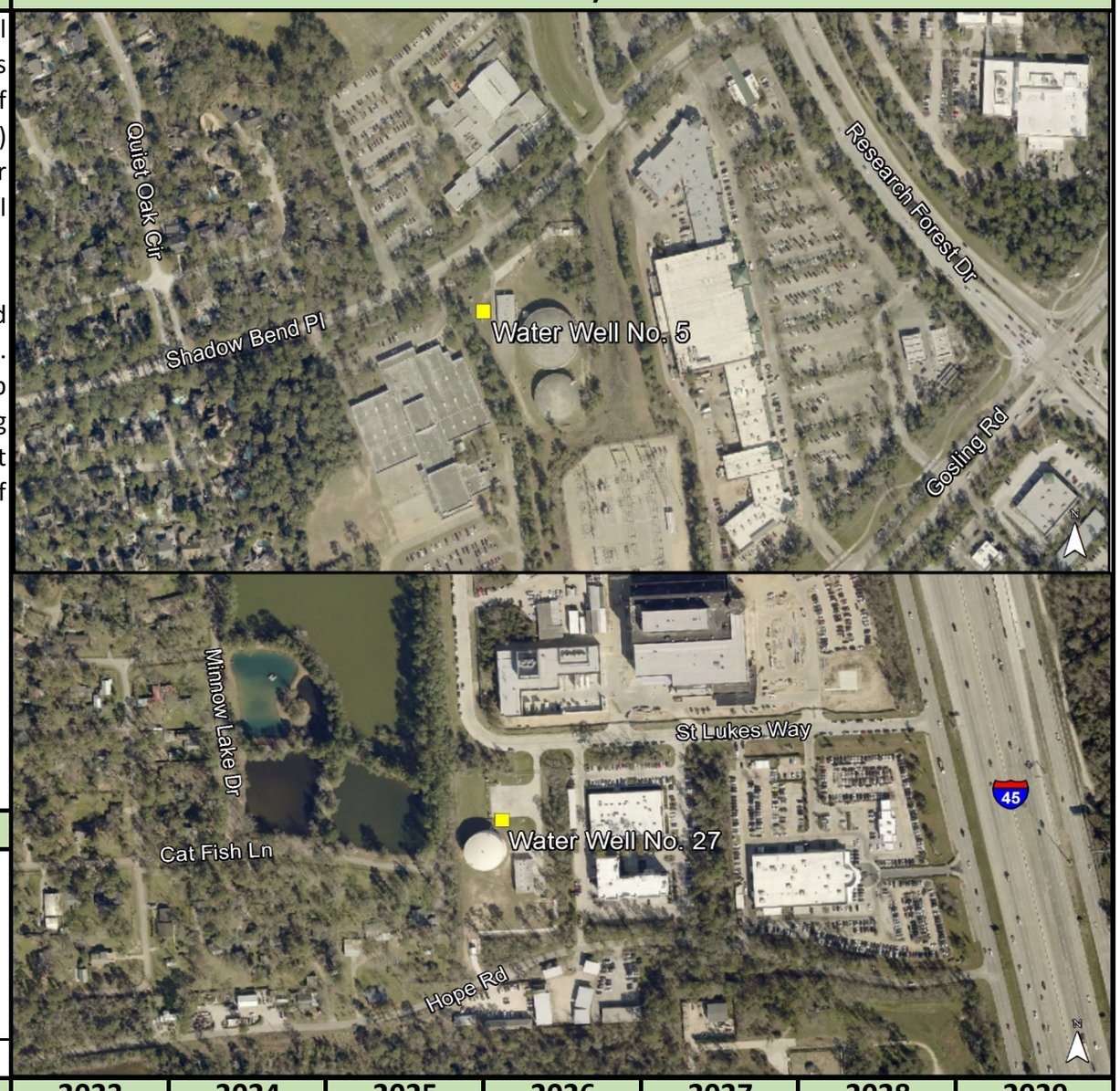
PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Rehabilitation of Water Well Nos. 5 & 27	WA27WR	2027	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The Woodlands began receiving treated surface water in 2015, however, peak water demands will continue to be met by existing ground water wells. Consequently, continued well rehabilitation is necessary in order to prolong service life, minimize risk of failure and reduce annual maintenance of the wells. SJRA completes a semi-annual inspection of each water well to determine which well(s) may require rehabilitation. The targeted well(s) are then compared to the long term water production needs to meet the needs of The Woodlands and are then evaluated based on the well retirement plan for either rehabilitation or abandonment.

Based upon an evaluation of the 38 water wells, Well Nos. 5 and 27 are anticipated to have the need for rehabilitation based upon date of last previous rehabilitation and production capabilities. Rehabilitation of Well Nos. 5 and 27 will include removing, inspecting, and possibly replacing pump and well equipment; performing well video survey(s); wire brushing the well screen section; jetting out and removing fill material from the bottom of the well; and performing acid chemical treatment of the well screen sections. Rehabilitation may also include adding gravel pack material to the well if needed.

PROJECT MAP/PICTURE



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2027	☐ DBB	☐ O&M
PSA/WO Issued:	2027	☐ CMAR	☐ Bonds
Final Proposal Docs:	2027	☑ CSP	☑ R&R
Proposals/Bids Received:	2027	☐ Other	☐ Other
Const. Contract to Board:	2027		
Substantial Completion:	2028	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ -											
Engineering/Design	$ 28,000									$ 28,000		
Construction	$ 563,000									$ 563,000		
CPS, CM&I, and CMT	$ 56,000									$ 56,000		
Land Acquisition	$ -											
Equipment Purchase	$ -											
Total	**$ 647,000**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ 647,000**	$ -	$ -

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Water Plant No. 2 Ground Storage Tank No. 1 Replacement	WA2GT1	2027-2028	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Ground Storage Tank 1 (GST No. 1) at Water Plant 2 is a concrete storage tank with a capacity of 2 million gallons (MG), and was originally constructed in 1982. The typical useful life for concrete ground storage tanks storing potable water is 50 years. GST No. 1 will reach the end of its useful life by year 2032, and should be replaced before then in order to maintain adequate storage capacity and reliable potable water service. Also, in 2017, structural deficiencies were identified during an annual inspection and repairs made.

The project will include demolition of the existing 2 MG concrete ground storage tank, construction of a new 2 MG concrete ground storage tank, and replacement of associated piping and appurtenances. Therefore, a condition assessment will be conducted over the next few years to re-assess the tank condition to determine the replacement date.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2027	☐ DBB	☐ O&M
PSA/WO Issued:	2027	☐ CMAR	☐ Bonds
Final Proposal Docs:	2027	☑ CSP	☑ R&R
Proposals/Bids Received:	2027	☐ Other	☐ Other
Const. Contract to Board:	2028		
Substantial Completion:	2028	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 319,000									$ 319,000		
Engineering/Design	$ 319,000									$ 319,000		
Construction	$ 6,373,000										$ 6,373,000	
CPS, CM&I, and CMT	$ 319,000										$ 319,000	
Land Acquisition	$ -											
Equipment Purchase	$ -											
Total	**$ 7,330,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 638,000**	**$ 6,692,000**	**$ -**

* Budget includes contingency

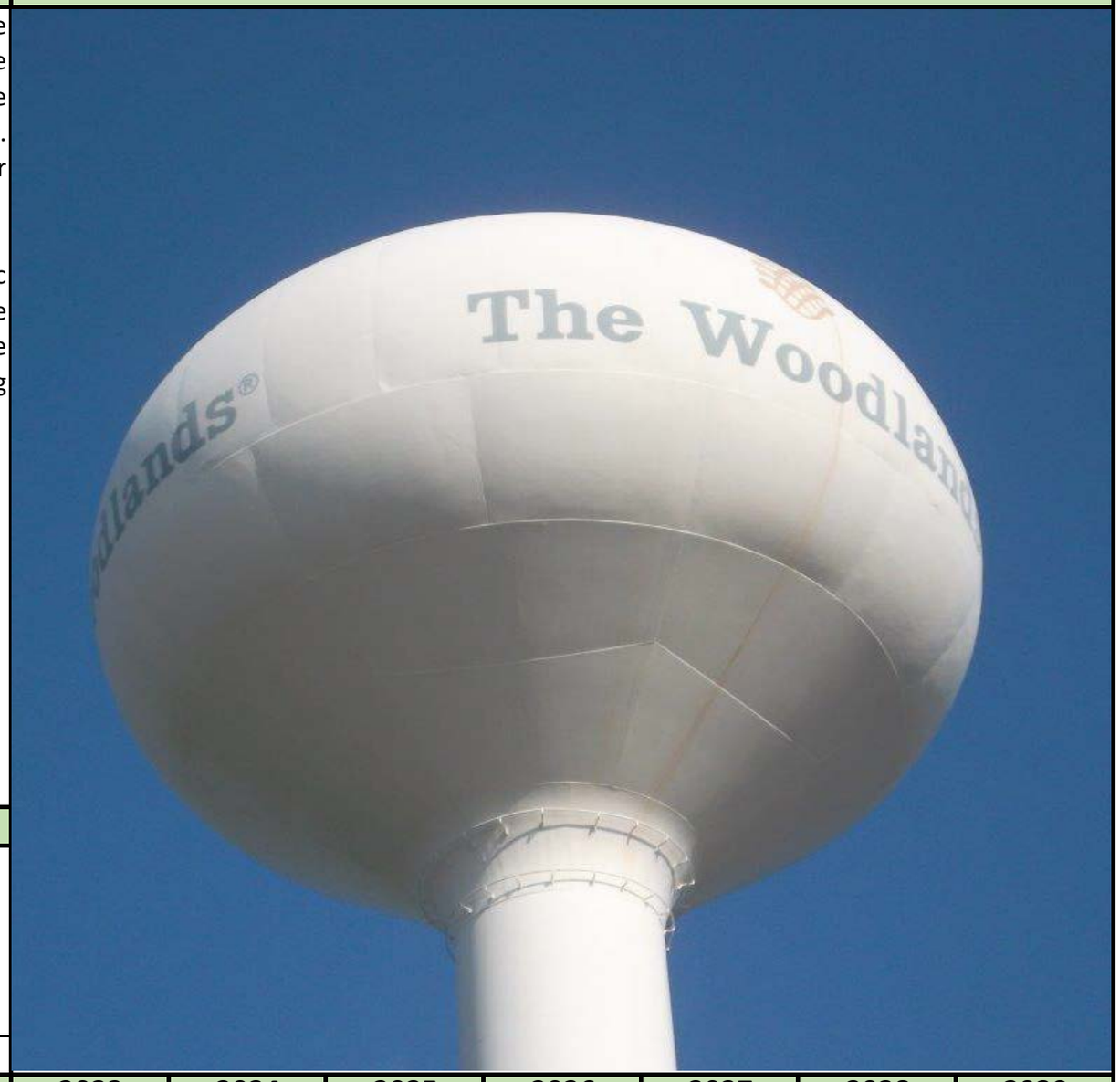
PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Elevated Storage Tank No. 7 Rehabilitation	WAET7R	2028	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Elevated Storage Tank No. 7 is a 500,000 gallon tank and was constructed in 1977. Based on the Dunham Engineering report completed in 2013, the exterior and interior coating systems were replaced in 2016 per the engineer's recommendation. A follow-up inspection of the tank will be completed in 2027 to identify the need and scope for any additional rehabilitation work. Anticipated rehabilitation of the tank includes recoating of the tank exterior and interior surfaces for maintenance and to continue to protect the exterior and interior from corrosion.

To protect the metal structure from corrosion and to extend the useful life of the tank, periodic protective coating system replacement is required. Interior coating systems meet their protective value in about 12-15 years and require system replacement in order to continue to provide adequate corrosion protection. The useful life of an exterior coating can be 10-12 years depending on the type of paint and thickness applied.

PROJECT MAP/PICTURE



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2028	☐ DBB	☐ O&M
PSA/WO Issued:	2028	☐ CMAR	☐ Bonds
Final Proposal Docs:	2028	☑ CSP	☑ R&R
Proposals/Bids Received:	2028	☐ Other	☐ Other
Const. Contract to Board:	2028		
Substantial Completion:	2029	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 91,000										$ 91,000	
Engineering/Design	$ 91,000										$ 91,000	
Construction	$ 905,000										$ 905,000	
CPS, CM&I, and CMT	$ 91,000										$ 91,000	
Land Acquisition												
Equipment Purchase												
Total	**$ 1,178,000**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ 1,178,000**	$ -

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Elevated Storage Tank No. 3 Rehabilitation	WAET3R	2029	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Elevated Storage Tank No. 3 is a 750,000 gallon tank and was constructed in 1990. Based on the Dunham Engineering report completed in 2013, the exterior and interior coating systems were replaced in 2017 per the engineer's recommendation. A follow-up inspection of the tank will be completed in 2028 to identify the need and scope for any additional rehabilitation work. Anticipated rehabilitation of the tank includes recoating of the tank exterior and interior surfaces for maintenance and to continue to protect the exterior and interior from corrosion.

To protect the metal structure from corrosion and to extend the useful life of the tank, periodic protective coating system replacement is required. Interior coating systems meet their protective value in about 12-15 years and require system replacement in order to continue to provide adequate corrosion protection. The useful life of an exterior coating can be 10-12 years depending on the type of paint and thickness applied.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2029	☐ DBB	☐ O&M
PSA/WO Issued:	2029	☐ CMAR	☐ Bonds
Final Proposal Docs:	2029	☑ CSP	☑ R&R
Proposals/Bids Received:	2029	☐ Other	☐ Other
Const. Contract to Board:	2029		
Substantial Completion:	2030	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 136,000											$ 136,000
Engineering/Design	$ 136,000											$ 136,000
Construction	$ 1,363,000											$ 1,363,000
CPS, CM&I, and CMT	$ 136,000											$ 136,000
Land Acquisition												
Equipment Purchase												
Total	**$ 1,771,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,771,000**

* Budget includes contingency

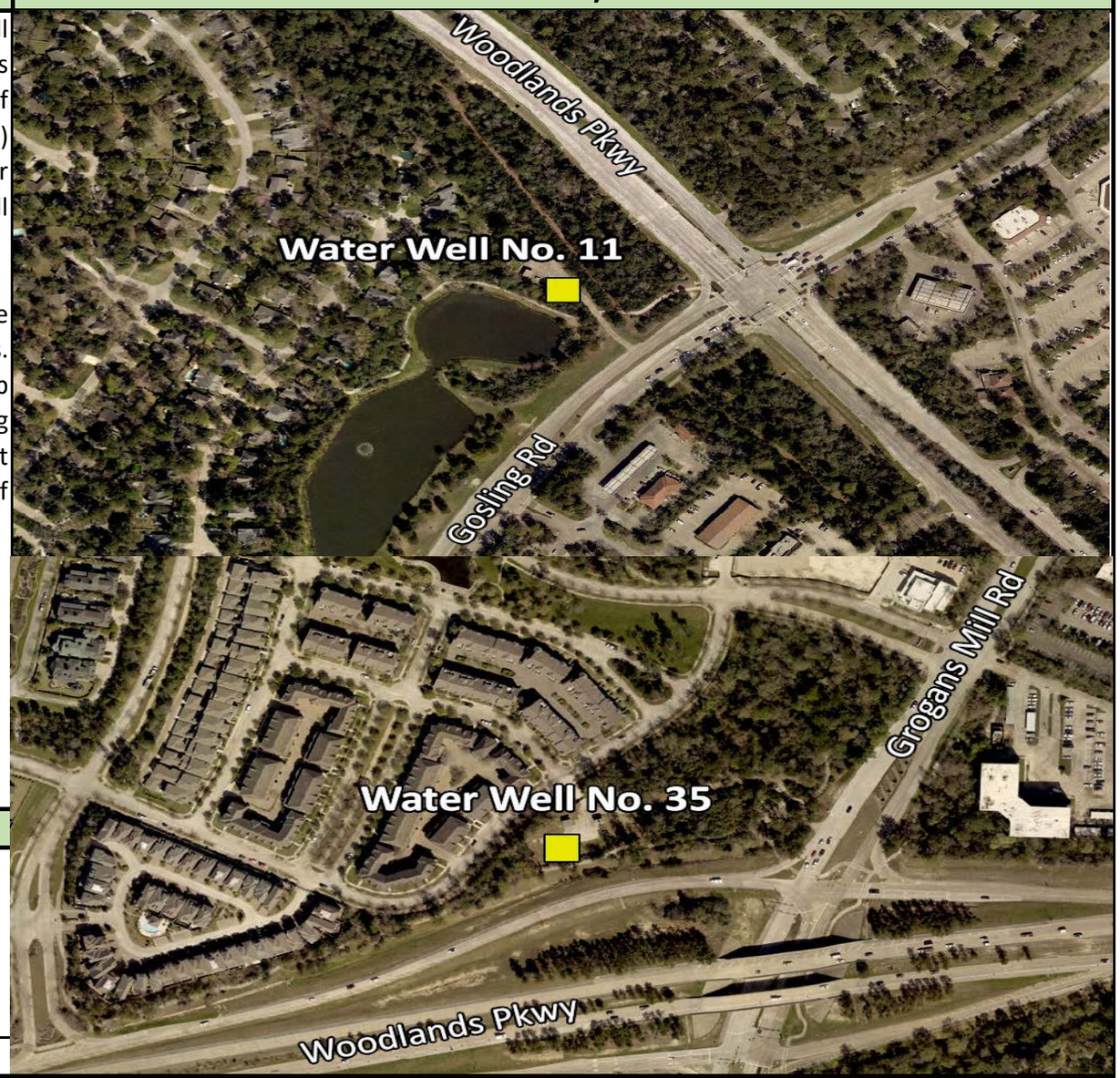
PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Rehabilitation of Water Well Nos. 11 & 35	WA29WR	2029	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The Woodlands began receiving treated surface water in 2015, however, peak water demands will continue to be met by existing ground water wells. Consequently, continued well rehabilitation is necessary in order to prolong service life, minimize risk of failure and reduce annual maintenance of the wells. SJRA completes a semi-annual inspection of each water well to determine which well(s) may require rehabilitation. The targeted well(s) are then compared to the long term water production needs to meet the needs of The Woodlands and are then evaluated based on the well retirement plan for either rehabilitation or abandonment.

Based upon an evaluation of the 38 water wells, Well Nos. 11 and 35 are anticipated to have the need for rehabilitation based upon date of last previous rehabilitation and production capabilities. Rehabilitation of Well Nos. 11 and 35 will include removing, inspecting, and possibly replacing pump and well equipment; performing well video survey(s); wire brushing the well screen section; jetting out and removing fill material from the bottom of the well; and performing acid chemical treatment of the well screen sections. Rehabilitation may also include adding gravel pack material to the well if needed.

PROJECT MAP/PICTURE



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2029	☐ DBB	☐ O&M
PSA/WO Issued:	2029	☐ CMAR	☐ Bonds
Final Proposal Docs:	2029	☑ CSP	☑ R&R
Proposals/Bids Received:	2029	☐ Other	☐ Other
Const. Contract to Board:	2029		
Substantial Completion:	2030	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ -											
Engineering/Design	$ -									$ -		$ 31,000
Construction	$ -									$ -		$ 620,000
CPS, CM&I, and CMT	$ -									$ -		$ 62,000
Land Acquisition	$ -											
Equipment Purchase	$ -											
Total	**$ 713,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 713,000**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Lift Station No. 5 Force Main Replacement	WWFM5R	2018 - 2020	Woodlands

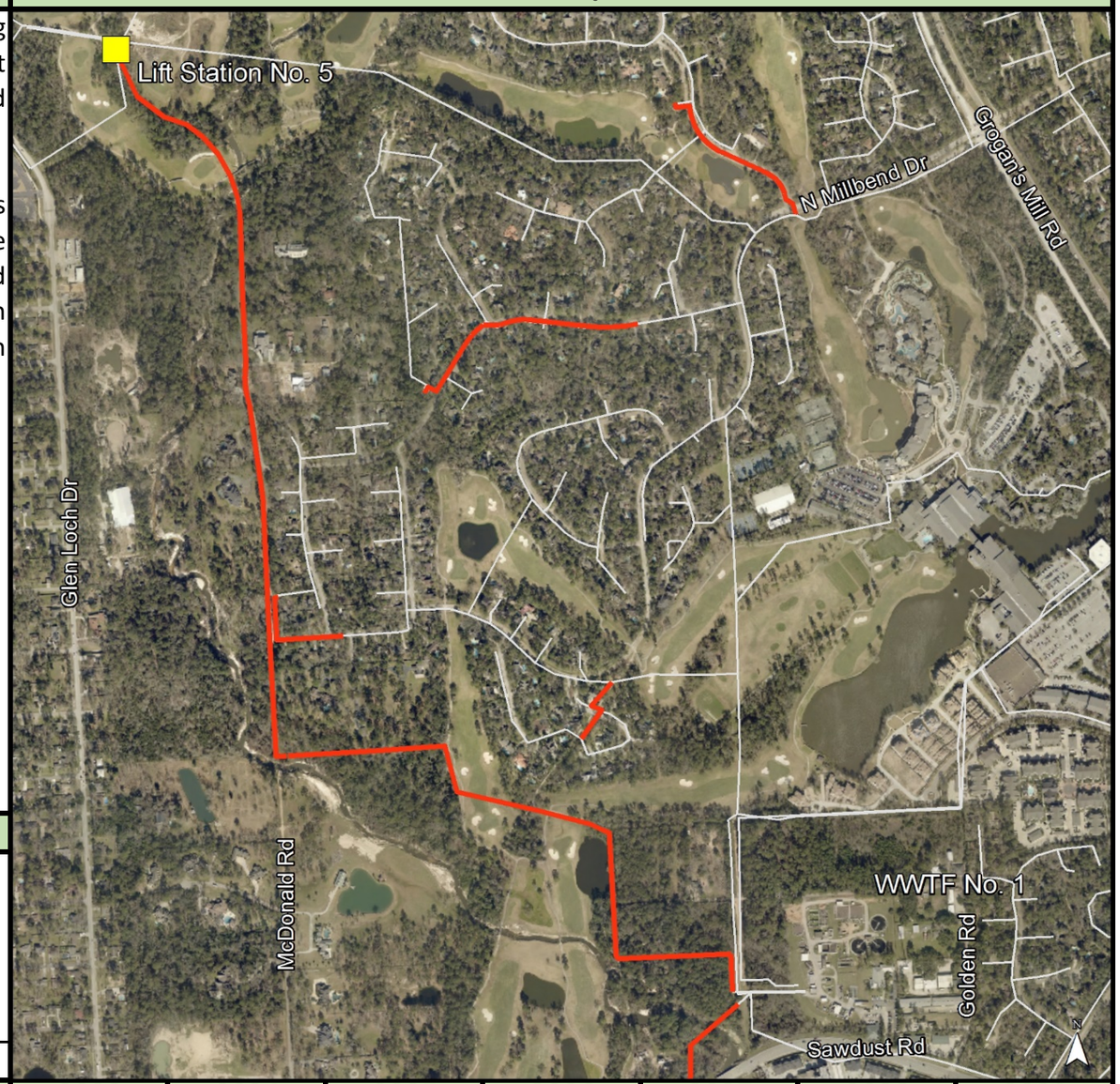
PROJECT DESCRIPTION/JUSTIFICATION:

Some parts of the existing collection system have been in service in excess of 40 years. The aging system requires rehabilitation or replacement to avoid collection system failure. Through the Asset Management Program, specific force mains were identified as high risk for failure and were evaluated for rehabilitation or replacement.

Based on a risk analysis of all force mains, the force main associated with Lift Station No. 5 was identified as a candidate for replacement based on pipe material, age, and likelihood and consequence of failure. In 2014, a SmartBall condition assessment was performed for this force main which showed several areas of corrosion throughout the force main. Constructed in the early 1980's, this force main consists of approximately 8,100 linear feet of 24-inch cement mortar lined ductile iron pipe, all of which is recommended for replacement.

Permanent easements will be acquired during this project.

PROJECT MAP/PICTURE



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	July 2017	☐ DBB	☐ O&M
PSA/WO Issued:	September 2017	☐ CMAR	☐ Bonds
Final Proposal Docs:	September 2019	☑ CSP	☑ R&R
Proposals/Bids Received:	November 2019	☐ Other	☐ Other
Const. Contract to Board:	January 2020		
Substantial Completion:	May 2021	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 344,000	$ 344,000										
Engineering/Design	$ 100,000	$ 100,000										
Construction	$ 4,066,000	$ 3,066,000	$ 1,000,000									
CPS, CM&I, and CMT	$ 100,000		$ 100,000									
Land Acquisition												
Equipment Purchase												
Total	**$ 4,610,000**	**$ 3,510,000**	**$ 1,100,000**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 2 Plant Process Water MCC	WW2MCC	2019-2020	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The replacement of Motor Control Center (MCC) for the Plant Process Water (PPW) area of Wastewater Treatment Facility No. 2 is needed due to age (was installed in 1993) and exterior / interior corrosion. The replacement of the existing MCC will prevent eventual electrical device failures and treatment process failures resulting in non-compliance with the TCEQ discharge permit.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	July 2018	☐ DBB	☐ O&M
PSA/WO Issued:	October 2018	☐ CMAR	☐ Bonds
Final Proposal Docs:	June 2019	☑ CSP	☑ R&R
Proposals/Bids Received:	July 2019	☐ Other	☐ Other
Const. Contract to Board:	September 2019		
Substantial Completion:	March 2020	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER												
Engineering/Design	$ 64,000	$ 64,000										
Construction	$ 318,000		$ 318,000									
CPS, CM&I, and CMT	$ 32,000		$ 32,000									
Land Acquisition												
Equipment Purchase												
Total	**$ 414,000**	**$ 64,000**	**$ 350,000**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Sanitary Sewer Transmission Assessment & Renewal (SSTAR) Program	WWSSES	2019-2020	Woodlands

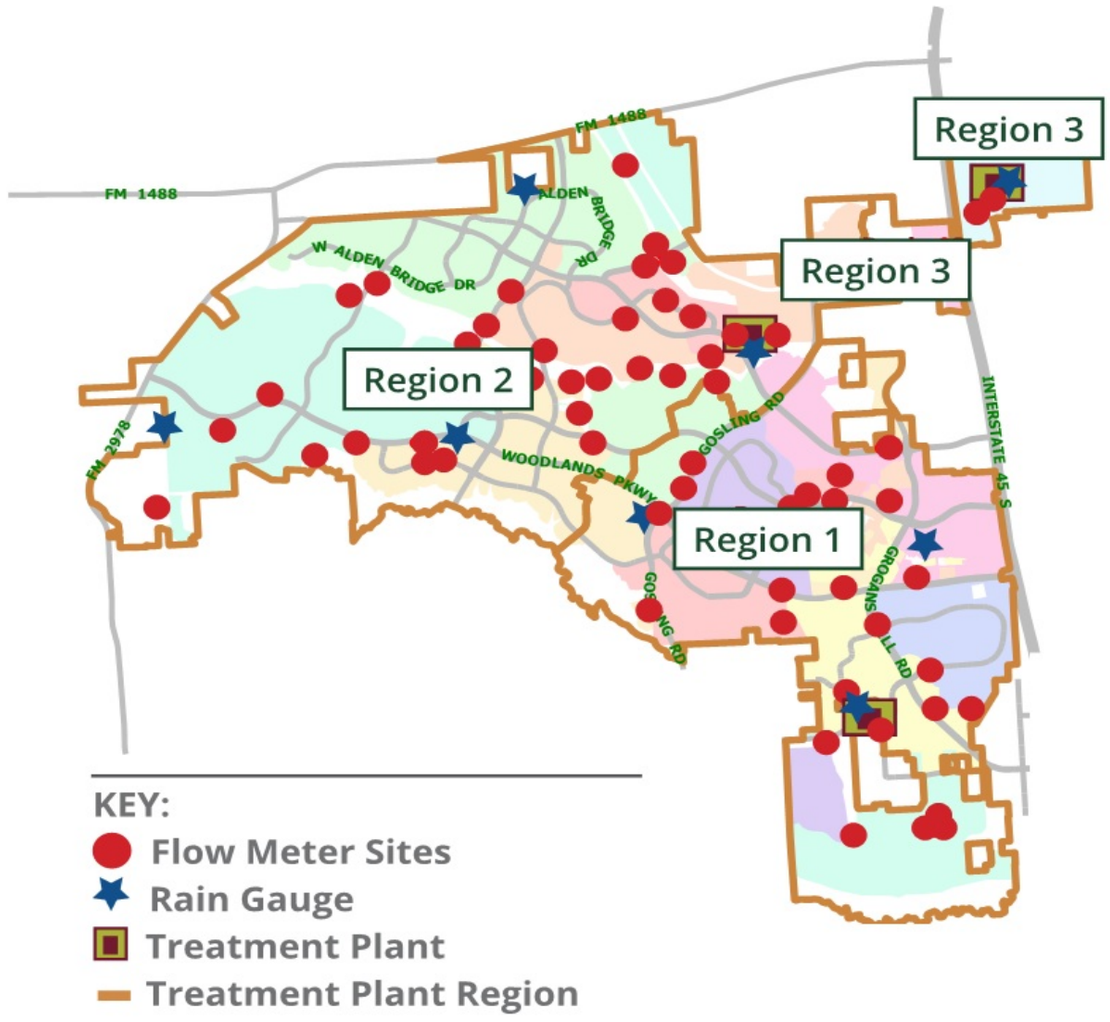
PROJECT DESCRIPTION/JUSTIFICATION:

The Sanitary Sewer Transmission Assessment and Renewal (SSTAR) Program is needed to evaluate the combined retail and wholesale wastewater collection system, with a focus on identifying areas with excessive infiltration and inflow (I&I). Measurements will be taken for a minimum of 9 months of flow data during dry weather and wet weather conditions. This data, and the previously adopted planning criteria, will also assist in re-calibrating the wastewater collection system model as is needed from time to time.

The project will include implementation of a multi-year SSTAR Program, including extensive flow monitoring of the combined retail and wholesale system, and analysis of flow monitoring and rainfall data. In addition, permanent flow monitors will be installed during the second year of the program, which will be utilized for the foreseeable future to monitor flows in the wholesale collection system.

The cost associated with this SSTAR Program and flow monitoring project is for the wholesale system only, and does not include targeted flow monitoring of the retail system.

PROJECT MAP/PICTURE



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	June 2018	☐ DBB	☐ O&M
PSA/WO Issued:	October 2018	☐ CMAR	☐ Bonds
Final Proposal Docs:	N/A	☐ CSP	☑ R&R
Proposals/Bids Received:	N/A	☑ Other	☐ Other
Const. Contract to Board:	N/A		
Substantial Completion:	August 2020	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 1,802,000	$ 502,000	$ 1,300,000									
Engineering/Design												
Construction												
CPS, CM&I, and CMT												
Land Acquisition												
Equipment Purchase												
Total	**$ 1,802,000**	**$ 502,000**	**$ 1,300,000**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Lift Station No. 13 Rehabilitation	WW19LS	2019-2021	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Each year, a comprehensive evaluation of all thirty lift stations in The Woodlands is conducted. This evaluation includes visual inspection and condition assessment ranking of each lift station by SJRA staff which results in a prioritized list of lift stations to be rehabilitated. Based on this list, rehabilitation of Lift Station No. 13 constructed in 1984, is recommended. Lift Station No. 13 (located on Flintridge Drive) is showing signs of deterioration, including degradation of concrete structure due to corrosive gas.

For Lift Station No. 13, the anticipated rehabilitation includes coating the wet well, as well as structural and mechanical improvements. This rehabilitation also will include converting from a dry well to a submersible station, and installation of a new control panel and a natural gas generator on a raised platform to allow for continuous use during flood events where power may be interrupted. By rehabilitating the concrete structure with a coating that is resistant to wastewater gases, it is estimated that the life of the structure can be maintained 10-15 years with continued preventative maintenance.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	August 2018	☐ DBB	☐ O&M
PSA/WO Issued:	December 2018	☐ CMAR	☐ Bonds
Final Proposal Docs:	August 2019	☑ CSP	☑ R&R
Proposals/Bids Received:	June 2020	☐ Other	☐ Other
Const. Contract to Board:	August 2020		
Substantial Completion:	2021	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 133,000	$ 133,000										
Engineering/Design	$ 316,333	$ 133,000		$ 183,333								
Construction	$ 1,833,334			$ 1,833,334								
CPS, CM&I, and CMT	$ 183,333			$ 183,333								
Land Acquisition												
Equipment Purchase												
Total	**$ 2,466,000**	**$ 266,000**	$ -	**$ 2,200,000**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Emergency Repair Service Center	WWERSC	2020	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

This project is for the construction of a metal building, tentatively sized at 40’ x 80' with an attached 20' x 40' awning, adjacent to Wastewater Treatment Facility (WWTF) No. 1. The purpose of the building is for the following: proper and secure storage of repair materials for pipelines, storage of rolling stock, manhole repair stock, and separate secure area for SCADA / I&C stock. Currently, repair materials and equipment are stored in multiple locations around WWTF No. 1 site. Some of these materials, due to size, are being stored outside which reduces the lifespan of the material due to composition breakdown with UV exposure. Rolling stock is also stored outside in the elements, reducing its service life.

The project may includes paving, most likely reinforced concrete, for a driveway and additional parking.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	July 2019	☐ DBB	☐ O&M
PSA/WO Issued:	September 2019	☐ CMAR	☐ Bonds
Final Proposal Docs:	December 2019	☑ CSP	☑ R&R
Proposals/Bids Received:	February 2020	☐ Other	☐ Other
Const. Contract to Board:	April 2020		
Substantial Completion:	October 2020	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER												
Engineering/Design	$ 10,000		$ 10,000									
Construction	$ 480,000		$ 480,000									
CPS, CM&I, and CMT	$ 10,000		$ 10,000									
Land Acquisition												
Equipment Purchase												
Total	**$ 500,000**	**$ -**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 2 Tertiary Filter Improvements (2nd Filter)	WW02FR	2021-2022	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Wastewater Treatment Facility (WWTF) No. 2 utilizes tertiary filters to treat effluent prior to disinfection. Filter Nos. 1 and 2 are sand filters, while Filter No. 3 was replaced with a new cloth media filter in 2016. The existing sand filters have been in service since the plant was expanded in 2006, and have experienced performance and hydraulic flow issues which limit wastewater flows through WWTF No. 2. This project will replace one of the remaining two sand filters with a cloth media filter which will eliminate the performance and hydraulic issues with the filter. Additionally, the typical useful life for sand filters is 15-25 years, so the filters will be nearing the end of their useful service life.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2021	☐ DBB	☐ O&M
PSA/WO Issued:	2021	☐ CMAR	☐ Bonds
Final Proposal Docs:	2021	☑ CSP	☑ R&R
Proposals/Bids Received:	2021	☐ Other	☐ Other
Const. Contract to Board:	2021		
Substantial Completion:	2022	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 350,000			$ 350,000								
Engineering/Design	$ 350,000			$ 350,000								
Construction	$ 2,450,000			$ 450,000	$ 2,000,000							
CPS, CM&I, and CMT	$ 350,000			$ 350,000								
Land Acquisition												
Equipment Purchase												
Total	**$ 3,500,000**	**$ -**	**$ -**	**$ 1,500,000**	**$ 2,000,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Gravity Main Rehabilitation	WW21GR	2022-2024	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

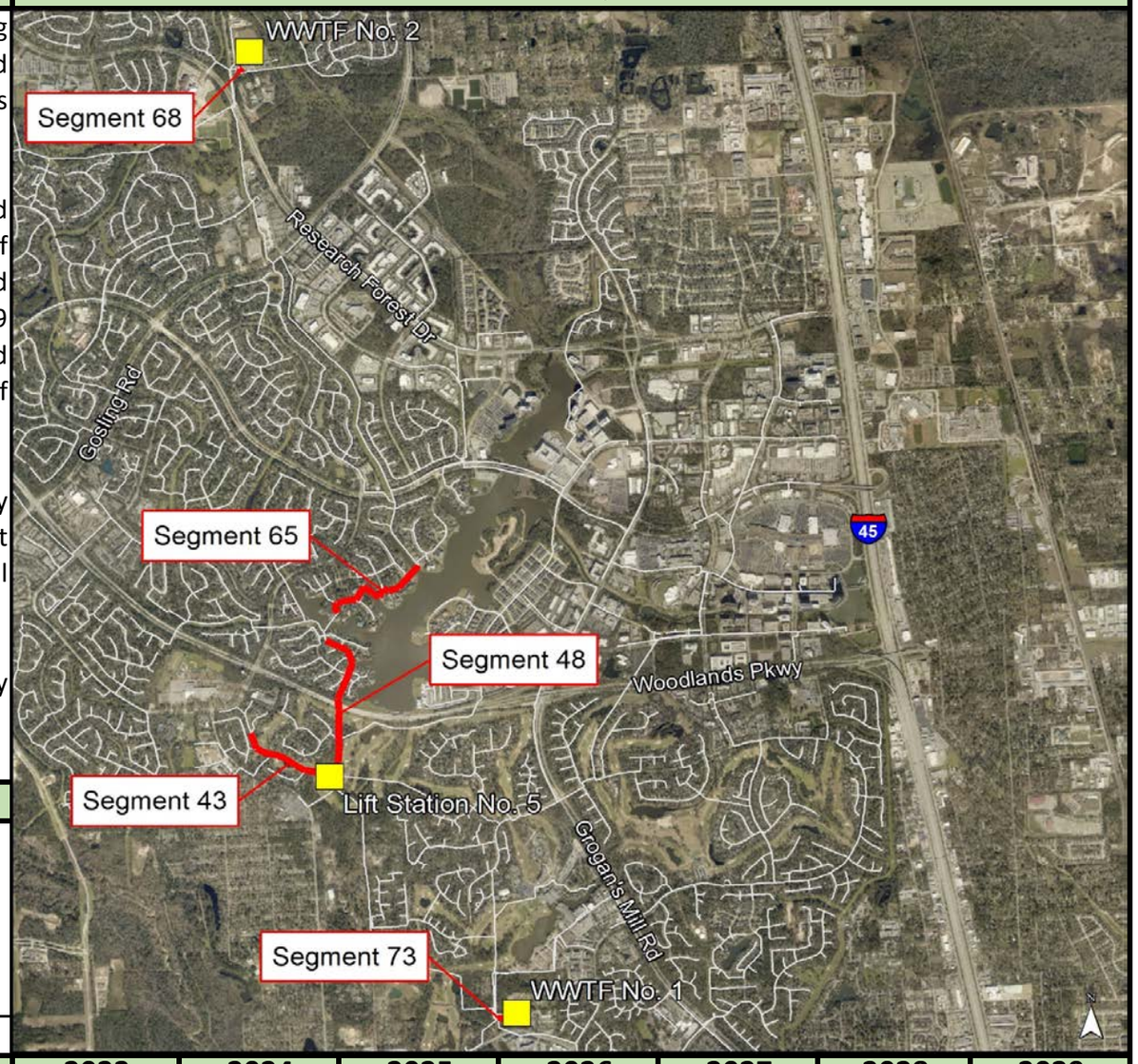
Some wastewater lines within the collection system have been in service for over 40 years. The aging system requires rehabilitation or renewal to avoid collection system failure, sewage overflows, and permit violations. Through the Asset Management Program, specific line segments were identified as high risk for failure and should be rehabilitated within the next few years.

The following Acrylonitrile-Butadiene-Styrene (ABS), ductile iron (DI), vitrified clay pipe (VCP), and reinforced concrete pipe (RCP) lines are planned for rehabilitation: Segment 43 (2,107 linear feet of 15-inch ABS); Segment 48 (3,487 linear feet of 42-inch DI) starting in The Cove subdivision and extending south across Woodlands Parkway, terminating at Lift Station No. 5; Segment 65 (3,309 linear feet of 24-inch DI) in the West Isle subdivision; Segment 68 (66 linear feet of 18-inch VCP); and Segment 73 (97 linear feet of 18-inch RCP) terminating at WWTF No. 1. These segments consist of approximately 9,066 linear feet of rehabilitation.

This project is part of a phased asset management approach to continuously rehabilitate sanitary sewer gravity mains in the system, to avoid collection system failure, sewage overflows, and permit violations. Other projects as described in WW17GR, WW23GR, WW24GR, and WW27GR will accomplish the goal of rehabilitating the gravity mains identified as being the highest risk for failure.

The results of the Sanitary Sewer Transmission Assessment and Renewal (SSTAR) Program may modify the wastewater line rehabilitation and 2-hour peak flow project prioritization.

PROJECT MAP/PICTURE



PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2022	☐ DBB	☐ O&M
PSA/WO Issued:	2022	☐ CMAR	☐ Bonds
Final Proposal Docs:	2022	☑ CSP	☑ R&R
Proposals/Bids Received:	2022	☐ Other	☐ Other
Const. Contract to Board:	2023		
Substantial Completion:	2024	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 515,000				$ 515,000							
Engineering/Design	$ 515,000				$ 515,000							
Construction	$ 5,281,000					$ 2,576,000	$2,705,000					
CPS, CM&I, and CMT	$ 529,000					$ 258,000	$ 271,000					
Land Acquisition												
Equipment Purchase												
Total	**$ 6,840,000**	**$ -**	**$ -**	**$ -**	**$ 1,030,000**	**$ 2,834,000**	**$2,976,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Forcemain Renewal - LS Nos. 7 and 11	WW22FM	2022-2023	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Some parts of the existing collection system have been in service for over 40 years. The aging system requires renewal to avoid collection system failure. Through the Asset Management Program, specific force mains were identified as high risk for failure and were evaluated for rehabilitation or replacement.

Based on a risk analysis of all force mains, including age, pipe material and likelihood of failure, the force mains associated with Lift Station Nos. 7 and 11 were identified as candidates for rehabilitation or replacement. The Lift Station No. 7 force main was constructed in 1978 and the Lift Station No. 11 force main was constructed in 1983.

The Preliminary Engineering Report (PER) conducted in 2015 recommended the replacement of the force main for Lift Station No. 7, which consists of approximately 1,700 linear feet of 10-inch ductile iron pipe, and the force main for Lift Station No. 11, which consists of approximately 1,900 linear feet of 10-inch ductile iron pipe. The PER indicated that these two force mains were good candidates for replacement based on heavy corrosion visible at the downstream manhole.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2022	☐ DBB	☐ O&M
PSA/WO Issued:	2022	☐ CMAR	☐ Bonds
Final Proposal Docs:	2022	☑ CSP	☑ R&R
Proposals/Bids Received:	2022	☐ Other	☐ Other
Const. Contract to Board:	2023		
Substantial Completion:	2023	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 115,000				$ 115,000							
Engineering/Design	$ 115,000				$ 115,000							
Construction	$ 1,152,000					$ 1,152,000						
CPS, CM&I, and CMT	$ 115,000					$ 115,000						
Land Acquisition												
Equipment Purchase												
Total	**$ 1,497,000**	$ -	$ -	$ -	**$ 230,000**	**$ 1,267,000**	$ -	$ -	$ -	$ -	$ -	$ -

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Lift Stations No. 1 and No. 8 Rehabilitation	WW22LS	2022-2023	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Each year, a comprehensive evaluation of all thirty lift stations in The Woodlands is conducted. This evaluation includes visual inspection and condition assessment ranking of each lift station by SJRA staff which results in a prioritized list of lift stations to be rehabilitated. Based on this list, rehabilitation of Lift Station No. 1, constructed in 1973, and No. 8, constructed in 1978, are recommended. Lift Station No. 1 (located near Grogans Mill and Woodlands Parkway) and Lift Station No. 8 (located near Sawmill Road and Sawdust Road) are showing signs of deterioration, including degradation of concrete structures due to corrosive sewer gases.

At Lift Station No. 1, the anticipated rehabilitation will include coating the wet well, replacing piping and valves, and electrical improvements. At Lift Station No. 8, the anticipated rehabilitation will include recoating the wet well, replacing pumps, replacing piping and valves, electrical improvements, and site improvements. By rehabilitating the concrete structure with a coating that is resistant to wastewater gases, it is estimated that the life of the structure can be maintained with continued preventative maintenance.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2022	☐ DBB	☐ O&M
PSA/WO Issued:	2022	☐ CMAR	☐ Bonds
Final Proposal Docs:	2022	☑ CSP	☑ R&R
Proposals/Bids Received:	2022	☐ Other	☐ Other
Const. Contract to Board:	2023		
Substantial Completion:	2023	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 92,000			$ -	$ 92,000							
Engineering/Design	$ 92,000			$ -	$ 92,000							
Construction	$ 915,000					$ 915,000						
CPS, CM&I, and CMT	$ 92,000					$ 92,000						
Land Acquisition												
Equipment Purchase												
Total	**$ 1,191,000**	**$ -**	**$ -**	**$ -**	**$ 184,000**	**$ 1,007,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 1 Clarifier Rehabilitation	WW01CR	2022-2023	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Two clarifiers at Wastewater Treatment Facility (WWTF) No. 1 were installed in 1982, and one clarifier was installed in the mid-1990's. The existing metal components are beginning to show signs of corrosion, however, the corrosion is currently being monitored. Typical useful life for wastewater treatment facility mechanical equipment is 20 years. The mechanical equipment in two of the clarifiers is nearing the end of its useful life, and will be evaluated for replacement as part of this project.

The project includes replacement of the mechanical components of Clarifier Nos. 1 and 2 including clarifier mechanisms, weirs and baffles, weir cleaning brushes, electrical, and instrumentation. The stilling well of Clarifier No. 3 will also be replaced.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2022	☐ DBB	☐ O&M
PSA/WO Issued:	2022	☐ CMAR	☐ Bonds
Final Proposal Docs:	2022	☑ CSP	☑ R&R
Proposals/Bids Received:	2023	☐ Other	☐ Other
Const. Contract to Board:	2023		
Substantial Completion:	2023	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 168,000				$ 168,000							
Engineering/Design	$ 168,000				$ 168,000							
Construction	$ 1,679,000					$ 1,679,000						
CPS, CM&I, and CMT	$ 168,000					$ 168,000						
Land Acquisition												
Equipment Purchase												
Total	**$ 2,183,000**	**$ -**	**$ -**	**$ -**	**$ 336,000**	**$ 1,847,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Gravity Main Rehabilitation	WW23GR	2023-2024	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Some wastewater lines within the collection system have been in service for over 40 years. The aging system requires rehabilitation to avoid collection system failure, sewage overflows, and permit violations. Through the Asset Management Program, specific line segments were identified as high risk for failure and should be rehabilitated within the next few years.

The following ductile iron (DI) lines that run along the north side of the Bear Branch Reservoir are planned for rehabilitation: Segment 2 (4,663 linear feet of 20-inch DI); and Segment 3 (2,046 linear feet of 24-inch DI). These segments consist of approximately 6,709 linear feet of rehabilitation.

This project is part of a phased asset management approach to continuously rehabilitate sanitary sewer gravity mains in the system, to avoid collection system failure, sewage overflows, and permit violations. Other projects as described in WW17GR, WW21GR, WW24GR, and WW27GR will accomplish the goal of rehabilitating the gravity mains identified as being the highest risk for failure.

The results of the Sanitary Sewer Transmission Assessment and Renewal (SSTAR) Program may modify the wastewater line rehabilitation and 2-hour peak flow project prioritization.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2023	☐ DBB	☐ O&M
PSA/WO Issued:	2023	☐ CMAR	☐ Bonds
Final Proposal Docs:	2023	☑ CSP	☑ R&R
Proposals/Bids Received:	2023	☐ Other	☐ Other
Const. Contract to Board:	2024		
Substantial Completion:	2024	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 249,000					$ 249,000						
Engineering/Design	$ 249,000					$ 249,000						
Construction	$ 2,493,000						$ 2,493,000					
CPS, CM&I, and CMT	$ 249,000						$ 249,000					
Land Acquisition												
Equipment Purchase												
Total	**$ 3,240,000**	$ -	$ -	$ -	$ -	**$ 498,000**	**$ 2,742,000**	$ -	$ -	$ -	$ -	$ -

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Forcemain Renewal - LS Nos. 8, 9, 10, & 21	WW23FM	2023-2024	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Some aging components of the existing collection system have been in service for over 40 years and will require renewal to avoid collection system failure. Through the Asset Management Program, specific force mains were identified as high risk for failure and will be evaluated for rehabilitation or replacement.

Based on a risk analysis of all force mains, the force mains associated with Lift Station Nos. 8, 9, 10, and 21 were identified as potential candidates for replacement due to age, pipe material and likelihood of failure. These force mains consist of: Lift Station No. 8 approximately 600 linear feet of 4-inch ductile iron pipe; Lift Station No. 9 approximately 414 linear feet of 12-inch ductile iron pipe; Lift Station No. 10 approximately 4,900 linear feet of 12-inch ductile iron pipe; and Lift Station No. 21 approximately 2,500 linear feet of 6-inch ductile iron pipe.

The Preliminary Engineering Report (PER) conducted in 2015 indicated that the condition of these force mains was better than others in the SJRA system, and were not in immediate need of replacement. However based on observed corrosion of similar ductile iron force mains in the SJRA system, these force mains should be reinspected. Upon reinspection, if corrosion has progressed, these force mains should be replaced.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2023	☐ DBB	☐ O&M
PSA/WO Issued:	2023	☐ CMAR	☐ Bonds
Final Proposal Docs:	2023	☑ CSP	☑ R&R
Proposals/Bids Received:	2024	☐ Other	☐ Other
Const. Contract to Board:	2024		
Substantial Completion:	2024	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 495,000					$ 495,000						
Engineering/Design	$ 495,000					$ 495,000						
Construction	$ 4,948,000						$ 4,948,000					
CPS, CM&I, and CMT	$ 495,000						$ 495,000					
Land Acquisition												
Equipment Purchase												
Total	**$ 6,433,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 990,000**	**$ 5,443,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 1 Rehabilitation of Lift Stations	WWF1LS	2024-2025	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Wastewater Treatment Facility (WWTF) No. 1, Lift Station No. 1 was constructed in 1975 and Lift Station No. 2 was constructed in 1982. After a visual inspection of the two existing lift stations at WWTF No. 1 by SJRA staff, it was found that Lift Station No. 1 was in fair/good condition, however Lift Station No. 2's wet well concrete structures display corrosion and should be repaired and coated to prevent additional corrosion in the future. Additionally, mechanical ventilation and odor control may be included as further means for corrosion reduction. By rehabilitating the concrete structure with a coating that is resistant to wastewater gases, it is estimated that the life of the structure can be maintained with continued preventative maintenance.

The anticipated rehabilitation may include conversion of one of the lift stations to a submersible lift station, electrical improvements, valve and pump replacement, and other repairs/improvements as defined in the Preliminary Engineering Report.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2024	☐ DBB	☐ O&M
PSA/WO Issued:	2024	☐ CMAR	☐ Bonds
Final Proposal Docs:	2024	☑ CSP	☑ R&R
Proposals/Bids Received:	2025	☐ Other	☐ Other
Const. Contract to Board:	2025		
Substantial Completion:	2025	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 277,000						$ 277,000					
Engineering/Design	$ 277,000						$ 277,000					
Construction	$ 2,767,000							$ 2,767,000				
CPS, CM&I, and CMT	$ 277,000							$ 277,000				
Land Acquisition												
Equipment Purchase												
Total	**$ 3,598,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 554,000**	**$ 3,044,000**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 2 Lift Station Pumping Improvements	WW02LS	2024-2025	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, an increase in the firm pumping capacity of the influent lift station at Wastewater Treatment Facility (WWTF) No. 2 is needed.

The project includes the expansion of the firm pumping capacity from 15.6 MGD to 23.1 MGD. The improvements include the replacement of four influent pumps with larger units, as well as replacement of riser and discharge piping.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2024	☐ DBB	☐ O&M
PSA/WO Issued:	2024	☐ CMAR	☐ Bonds
Final Proposal Docs:	2024	☑ CSP	☑ R&R
Proposals/Bids Received:	2025	☐ Other	☐ Other
Const. Contract to Board:	2025		
Substantial Completion:	2025	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 379,000						$ 379,000					
Engineering/Design	$ 379,000						$ 379,000					
Construction	$ 3,791,000							$ 3,791,000				
CPS, CM&I, and CMT	$ 379,000							$ 379,000				
Land Acquisition												
Equipment Purchase												
Total	**$ 4,928,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 758,000**	**$ 4,170,000**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Forcemain Renewal - LS Nos. 1, 13, 14, & 19	WW24FM	2024-2025	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Some aging components of the existing collection system have been in service for over 40 years and will require renewal to avoid collection system failure. Through the Asset Management Program, specific force mains were identified as high risk for failure and will be evaluated for rehabilitation or replacement.

Based on a risk analysis of all force mains, the force mains associated with Lift Station Nos. 1, 13, 14, and 19 were identified as candidates for replacement due to age, pipe material and likelihood of failure. These force mains consist of: Lift Station No. 1 approximately 1,663 linear feet of 12-inch cast iron pipe, Lift Station No. 13 approximately 2,432 linear feet of 12-inch ductile iron pipe, Lift Station No. 14 approximately 1,775 linear feet of 12-inch ductile iron pipe, and Lift Station No. 19 approximately 646 linear feet of 4-inch ductile iron pipe.

Based on observed corrosion of similar ductile iron force mains in the SJRA system, these force mains should be inspected. Upon inspection, if severe corrosion is evident, these force mains should be replaced.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2024	☐ DBB	☐ O&M
PSA/WO Issued:	2024	☐ CMAR	☐ Bonds
Final Proposal Docs:	2024	☑ CSP	☑ R&R
Proposals/Bids Received:	2025	☐ Other	☐ Other
Const. Contract to Board:	2025		
Substantial Completion:	2026	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 293,000						$ 293,000					
Engineering/Design	$ 293,000						$ 293,000					
Construction	$ 2,927,000							$ 2,927,000				
CPS, CM&I, and CMT	$ 293,000							$ 293,000				
Land Acquisition												
Equipment Purchase												
Total	**$ 3,806,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 586,000**	**$ 3,220,000**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Lift Stations No. 2 and No. 19 Rehabilitation	WW24LS	2024-2025	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Each year, a comprehensive evaluation of all thirty lift stations in The Woodlands is conducted. This evaluation includes visual inspection and condition assessment ranking of each lift station by SJRA staff which results in a prioritized list of lift stations to be rehabilitated. Based on this list, rehabilitation of Lift Station No. 2, constructed in 1973, and No. 19, constructed in the 1980's, are recommended. Lift Station No. 2 (located on Wildridge Drive) and Lift Station No. 19 (located on McDonald Road) are showing signs of deterioration, including degradation of concrete structures due to corrosive gases.

For Lift Station No. 2, the anticipated rehabilitation will include coating the wet well and electrical improvements. For Lift Station No. 19, the anticipated rehabilitation will include coating the wet well and electrical improvements. By rehabilitating the concrete structure with a coating that is resistant to wastewater gases, it is estimated that the life of the structure can be maintained with continued preventative maintenance.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2024	☐ DBB	☐ O&M
PSA/WO Issued:	2024	☐ CMAR	☐ Bonds
Final Proposal Docs:	2024	☑ CSP	☑ R&R
Proposals/Bids Received:	2025	☐ Other	☐ Other
Const. Contract to Board:	2025		
Substantial Completion:	2025	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 50,000						$ 50,000					
Engineering/Design	$ 101,000						$ 101,000					
Construction	$ 1,008,000							$ 1,008,000				
CPS, CM&I, and CMT	$ 101,000							$ 101,000				
Land Acquisition												
Equipment Purchase												
Total	**$ 1,260,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 151,000**	**$ 1,109,000**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Gravity Main Rehabilitation	WW24GR	2024-2025	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Some wastewater lines within the collection system have been in service for over 40 years. The aging system requires rehabilitation or renewal to avoid collection system failure, sewage overflows, and permit violations. Through the Asset Management Program, specific line segments were identified as high risk for failure and should be rehabilitated within the next few years.

The ductile iron (DI) line that runs along the east side of Lake Woodlands is planned for rehabilitation. This segment consists of a total of 12,575 linear feet of 42-inch DI, which would be rehabilitated in two projects; the northernmost 5,245 linear feet in 2024, and the remaining 7,330 linear feet in 2026.

This project is the fourth in a phased asset management approach to continuously rehabilitate sanitary sewer gravity mains in the system, to avoid collection system failure, sewage overflows, and permit violations. Other projects as described in WW17GR, WW21GR, WW23GR, and WW27GR will accomplish the goal of rehabilitating the gravity mains identified as being the highest risk for failure.

The results of the Sanitary Sewer Transmission Assessment and Renewal (SSTAR) Program may modify the wastewater line rehabilitation and 2-hour peak flow project prioritization.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2024	☐ DBB	☐ O&M
PSA/WO Issued:	2024	☐ CMAR	☐ Bonds
Final Proposal Docs:	2024	☑ CSP	☑ R&R
Proposals/Bids Received:	2024	☐ Other	☐ Other
Const. Contract to Board:	2025		
Substantial Completion:	2025	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 565,000						$ 565,000					
Engineering/Design	$ 565,000						$ 565,000					
Construction	$ 5,651,000							$ 5,651,000				
CPS, CM&I, and CMT	$ 565,000							$ 565,000				
Land Acquisition												
Equipment Purchase												
Total	**$ 7,346,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$1,130,000**	**$6,216,000**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 2 Belt Press and Conveyor Replacement	WW2SCR	2024-2025	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

One of two existing sludge belt filter presses and the dewatered sludge truck load-off conveyor at Wastewater Treatment Facility (WWTF) No. 2 were installed in 1997 and are approaching the end of their useful life. The belt filter press and the belt-type conveyor are experiencing reoccurring mechanical issues which require more frequent repairs. The existing 1.5 meter belt filter press will be replaced with a 2 meter belt filter press in order to optimize the operations of the facility.

The belt-type conveyor is very steep and allows dewatered sludge to slough and fall onto the floor creating safety concerns and constant need for clean-up. The current belt-type conveyor system will be replaced with a screw-type conveyance system. The screw-type conveyor is in an enclosed unit, which will prevent spillage of dewatered sludge onto the floor, eliminating the need for regular cleaning.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2024	☐ DBB	☐ O&M
PSA/WO Issued:	2024	☐ CMAR	☐ Bonds
Final Proposal Docs:	2024	☑ CSP	☑ R&R
Proposals/Bids Received:	2024	☐ Other	☐ Other
Const. Contract to Board:	2025		
Substantial Completion:	2025	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 198,000						$ 198,000					
Engineering/Design	$ 198,000						$ 198,000					
Construction	$ 1,978,000							$ 1,978,000				
CPS, CM&I, and CMT	$ 198,000							$ 198,000				
Land Acquisition												
Equipment Purchase												
Total	**$ 2,572,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 396,000**	**$ 2,176,000**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 3 PPW Pressure System Improvements	WWF3PW	2024-2025	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The Plant Process Water (PPW) system at Wastewater Treatment Facility (WWTF) No. 3 was installed in 2001. For this facility, the PPW system includes a hydropneumatic tank which serves to maintain pressure within the PPW system piping during periods of less PPW use and allow the PPW pumps to shut off.

The hydropneumatic tank will be removed and the system reconfigured to allow for on-demand continuous pumping, but with the flexibility to rotate the pumps so that not all are running continuously. SCADA controls will be added to allow for the pump rotation based upon run-time.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2024	☐ DBB	☐ O&M
PSA/WO Issued:	2024	☐ CMAR	☐ Bonds
Final Proposal Docs:	2024	☑ CSP	☑ R&R
Proposals/Bids Received:	2025	☐ Other	☐ Other
Const. Contract to Board:	2025		
Substantial Completion:	2025	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 30,000						$ 30,000					
Engineering/Design	$ 30,000						$ 30,000					
Construction	$ 303,000							$ 303,000				
CPS, CM&I, and CMT	$ 30,000							$ 30,000				
Land Acquisition												
Equipment Purchase												
Total	**$ 393,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 60,000**	**$ 333,000**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 1 Addition of 4th Clarifier	WW01CL	2025-2026	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, an additional clarifier is needed at Wastewater Treatment Facility (WWTF) No. 1.

The project includes addition of a fourth clarifier of the same size (87-ft diameter) as the three existing clarifiers, for an additional 7.1 MGD capacity and a total secondary clarification capacity of 28.4 MGD. The project also includes adding new return activated sludge (RAS) pumps, waste activated sludge (WAS) pumps, and scum pumps.

The results of the Sanitary Sewer Transmission Assessment and Renewal (SSTAR) Program may modify the wastewater line rehabilitation and 2-hour peak flow project prioritization.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2025	☐ DBB	☐ O&M
PSA/WO Issued:	2025	☐ CMAR	☐ Bonds
Final Proposal Docs:	2025	☑ CSP	☑ R&R
Proposals/Bids Received:	2026	☐ Other	☐ Other
Const. Contract to Board:	2026		
Substantial Completion:	2027	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 642,000							$ 642,000				
Engineering/Design	$ 642,000							$ 642,000				
Construction	$ 6,419,000								$ 6,419,000			
CPS, CM&I, and CMT	$ 642,000								$ 642,000			
Land Acquisition												
Equipment Purchase												
Total	**$ 8,345,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,284,000**	**$ 7,061,000**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 1 Disinfection System Improvements	WW01DS	2025-2026	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, significant improvements to the existing disinfection system at Wastewater Treatment Facility (WWTF) No. 1 are needed.

The project includes addition of a third chlorine contact basin structure, two new chemical storage facilities, two new dry chemical scrubbers and duct work, thirty one-ton container scales and feed equipment, emergency shutoff valves, chemical dose equipment, piping and valves.

The results of the Sanitary Sewer Transmission Assessment and Renewal (SSTAR) Program may modify the wastewater line rehabilitation and 2-hour peak flow project prioritization.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2025	☐ DBB	☐ O&M
PSA/WO Issued:	2025	☐ CMAR	☐ Bonds
Final Proposal Docs:	2025	☑ CSP	☑ R&R
Proposals/Bids Received:	2026	☐ Other	☐ Other
Const. Contract to Board:	2026		
Substantial Completion:	2027	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 1,166,000							$ 1,166,000				
Engineering/Design	$ 1,166,000							$ 1,166,000				
Construction	$ 11,663,000								$ 11,663,000			
CPS, CM&I, and CMT	$ 1,166,000								$ 1,166,000			
Land Acquisition												
Equipment Purchase												
Total	**$ 15,161,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,332,000**	**$ 12,829,000**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Lift Station 24B Expansion and Force Main Replacement	WWLS24	2026-2027	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, expansion of Lift Station No. 24B and its associated force main is needed. This project includes the expansion of Lift Station 24B firm pumping capacity from 3.76 MGD to 7.78 MGD. This project includes a new wet well, pumps, and electrical system. This project also includes a replacement 20-inch force main. The hydraulic wastewater model evaluation shows the existing lift station firm capacity is insufficient to convey the modeled instantaneous peak wastewater flows.

The results of the Sanitary Sewer Transmission Assessment and Renewal (SSTAR) Program may modify the wastewater line rehabilitation and 2-hour peak flow project prioritization.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2026	☐ DBB	☐ O&M
PSA/WO Issued:	2026	☐ CMAR	☐ Bonds
Final Proposal Docs:	2026	☐ CSP	☐ R&R
Proposals/Bids Received:	2027	☐ Other	☐ Other
Const. Contract to Board:	2027		
Substantial Completion:	2028	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 913,000								$ 913,000			
Engineering/Design	$ 913,000								$ 913,000			
Construction	$ 9,129,000									$ 9,129,000		
CPS, CM&I, and CMT	$ 913,000									$ 913,000		
Land Acquisition												
Equipment Purchase												
Total	**$ 11,868,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,826,000**	**$ 10,042,000**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Enlargement of Lift Station 24 Gravity Line	WWGL24	2026-2027	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, replacement of the gravity lines upstream of Lift Station No. 24 with larger lines is required.

This project includes the construction of replacement of existing 24-inch gravity lines with 30-inch and 36-inch gravity lines upstream of LS 24. The hydraulic wastewater model evaluation shows the existing gravity lines have insufficient capacity to convey the modeled instantaneous peak wastewater flows.

The results of the Sanitary Sewer Transmission Assessment and Renewal (SSTAR) Program may modify the wastewater line rehabilitation and 2-hour peak flow project prioritization.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2026	☐ DBB	☐ O&M
PSA/WO Issued:	2026	☐ CMAR	☐ Bonds
Final Proposal Docs:	2026	☑ CSP	☑ R&R
Proposals/Bids Received:	2027	☐ Other	☐ Other
Const. Contract to Board:	2027		
Substantial Completion:	2027	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 747,000								$ 747,000			
Engineering/Design	$ 747,000								$ 747,000			
Construction	$ 7,471,000									$ 7,471,000		
CPS, CM&I, and CMT	$ 747,000									$ 747,000		
Land Acquisition												
Equipment Purchase												
Total	**$ 9,712,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,494,000**	**$ 8,218,000**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Lift Station No. 7 Expansion	WWLS07	2026-2027	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, expansion of Lift Station No. 7 is needed. This project includes the expansion of Lift Station 7 firm pumping capacity from 1.0 MGD to 1.44 MGD. This project includes replacement of pumps and electrical with larger units. The hydraulic wastewater model evaluation shows the existing lift station firm capacity is insufficient to convey the modeled instantaneous peak wastewater flows.

The results of the Sanitary Sewer Transmission Assessment and Renewal (SSTAR) Program may modify the wastewater line rehabilitation and 2-hour peak flow project prioritization.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2026	☐ DBB	☐ O&M
PSA/WO Issued:	2026	☐ CMAR	☐ Bonds
Final Proposal Docs:	2026	☑ CSP	☑ R&R
Proposals/Bids Received:	2027	☐ Other	☐ Other
Const. Contract to Board:	2027		
Substantial Completion:	2027	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 65,000								$ 65,000			
Engineering/Design	$ 65,000								$ 65,000			
Construction	$ 646,000									$ 646,000		
CPS, CM&I, and CMT	$ 65,000									$ 65,000		
Land Acquisition												
Equipment Purchase												
Total	**$ 841,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 130,000**	**$ 711,000**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 1 Generator Replacement	WWF1GN	2026-2027	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

The 2,000 kW natural gas standby generator at Wastewater Treatment Facility No. 1 was installed in 2000. This generator provides the primary backup power source for Wastewater Treatment Plant No. 1 in the event of power outage. In order to maintain reliable power backup for the wastewater facility, it is recommended to replace this generator as it is anticipated to reach the end of its useful life. Also, continued maintenance costs rise as replacement parts become less available.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2026	☐ DBB	☐ O&M
PSA/WO Issued:	2026	☐ CMAR	☐ Bonds
Final Proposal Docs:	2026	☑ CSP	☑ R&R
Proposals/Bids Received:	2026	☐ Other	☐ Other
Const. Contract to Board:	2027		
Substantial Completion:	2027	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ -											
Engineering/Design	$ 118,000								$ 118,000			
Construction	$ 1,180,000									$ 1,180,000		
CPS, CM&I, and CMT	$ 118,000									$ 118,000		
Land Acquisition												
Equipment Purchase												
Total	**$ 1,416,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 118,000**	**$ 1,298,000**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Lift Station No. 25 Rehabilitation	WW26LS	2026-2027	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Each year, a comprehensive evaluation of all thirty lift stations in The Woodlands is conducted. This evaluation includes visual inspection and condition assessment ranking of each lift station by SJRA staff which results in a prioritized list of lift stations to be rehabilitated. Based on this list, rehabilitation of Lift Station No. 25, constructed in 1994, is recommended to be performed by FY2027. Lift Station No. 25 (located on College Park Drive) is starting to show signs of deterioration, including degradation of concrete structures due to corrosive gases.

For Lift Station No. 25, the anticipated rehabilitation will include coating the wet well and mechanical improvements. The rehabilitation also will include converting from a dry well to a submersible station. By rehabilitating the concrete structure with a coating that is resistant to wastewater gases, it is estimated that the life of the structure can be maintained 10-15 years with continued preventative maintenance.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2026	☐ DBB	☐ O&M
PSA/WO Issued:	2026	☐ CMAR	☐ Bonds
Final Proposal Docs:	2026	☑ CSP	☑ R&R
Proposals/Bids Received:	2026	☐ Other	☐ Other
Const. Contract to Board:	2027		
Substantial Completion:	2027	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 331,000								$ 331,000			
Engineering/Design	$ 331,000								$ 331,000			
Construction	$ 3,310,000									$ 3,310,000		
CPS, CM&I, and CMT	$ 331,000									$ 331,000		
Land Acquisition												
Equipment Purchase												
Total	**$ 4,303,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 662,000**	**$ 3,641,000**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Lift Station Rehabilitation	WWLSRB	2027-2029	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Each year, a comprehensive evaluation of all thirty lift stations in The Woodlands is conducted. This evaluation includes visual inspection and condition assessment ranking of each lift station by SJRA staff which results in a prioritized list of lift stations to be rehabilitated. Based on this list, one lift station is anticipated to be rehabilitated each year starting in FY 2026. The anticipated rehabilitation may include recoating the wet well, replacing pumps, replacing piping and valves, electrical improvements, and site improvements. By rehabilitating the concrete structure with a coating that is resistant to wastewater gases, it is estimated the structure can be maintained for its intended useful life with continued preventative maintenance.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2027	☐ DBB	☐ O&M
PSA/WO Issued:	2027	☐ CMAR	☐ Bonds
Final Proposal Docs:	2027	☑ CSP	☑ R&R
Proposals/Bids Received:	2027	☐ Other	☐ Other
Const. Contract to Board:	2028		
Substantial Completion:	2029	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ -											
Engineering/Design	$ 169,000									$ 54,000	$ 56,000	$ 59,000
Construction	$ 1,693,000									$ 537,000	$ 564,000	$ 592,000
CPS, CM&I, and CMT	$ 169,000									$ 54,000	$ 56,000	$ 59,000
Land Acquisition												
Equipment Purchase												
Total	**$ 2,031,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 645,000**	**$ 676,000**	**$ 710,000**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Lift Station No. 6 Expansion	WWLS06	2027-2028	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, expansion of Lift Station No. 6 is needed. This project includes the expansion of Lift Station 6 firm pumping capacity from 0.97 MGD to 1.30 MGD. This project includes replacement of pumps and electrical with larger units. The hydraulic wastewater model evaluation shows the existing lift station firm capacity is insufficient to convey the modeled instantaneous peak wastewater flows.

The results of the Sanitary Sewer Transmission Assessment and Renewal (SSTAR) Program may modify the wastewater line rehabilitation and 2-hour peak flow project prioritization.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2027	☐ DBB	☐ O&M
PSA/WO Issued:	2027	☐ CMAR	☐ Bonds
Final Proposal Docs:	2027	☑ CSP	☑ R&R
Proposals/Bids Received:	2028	☐ Other	☐ Other
Const. Contract to Board:	2028		
Substantial Completion:	2028	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 61,000									$ 61,000		
Engineering/Design	$ 61,000									$ 61,000		
Construction	$ 611,000										$ 611,000	
CPS, CM&I, and CMT	$ 61,000										$ 61,000	
Land Acquisition												
Equipment Purchase												
Total	**$ 794,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 122,000**	**$ 672,000**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Gravity Main Rehabilitation	WW27GR	2027-2028	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Some wastewater lines within the collection system have been in service for over 40 years. The aging system requires rehabilitation or renewal to avoid collection system failure, sewage overflows, and permit violations. Through the Asset Management Program, specific line segments were identified as high risk for failure and should be rehabilitated within the next few years.

The ductile iron (DI) line that runs along the east side of Lake Woodlands is planned for rehabilitation. This segment consists of a total of 12,575 linear feet of 42-inch DI, which would be rehabilitated in two projects; the northernmost 5,245 linear feet in 2024, and the remaining 7,330 linear feet in 2026.

This project is the fifth in a phased asset management approach to continuously rehabilitate sanitary sewer gravity mains in the system, to avoid collection system failure, sewage overflows, and permit violations. Other projects as described in WW17GR, WW19GR, WW23GR, and WW24GR will accomplish the goal of rehabilitating the gravity mains identified as being the highest risk for failure.

The results of the Sanitary Sewer Transmission Assessment and Renewal (SSTAR) Program may modify the wastewater line rehabilitation and 2-hour peak flow project prioritization.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2027	☐ DBB	☐ O&M
PSA/WO Issued:	2027	☐ CMAR	☐ Bonds
Final Proposal Docs:	2027	☑ CSP	☑ R&R
Proposals/Bids Received:	2028	☐ Other	☐ Other
Const. Contract to Board:	2028		
Substantial Completion:	2028	☐ Capitalized	☑ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 914,000									$ 914,000		
Engineering/Design	$ 914,000									$ 914,000		
Construction	$ 9,142,000										$ 9,142,000	
CPS, CM&I, and CMT											$ 914,200	
Land Acquisition												
Equipment Purchase												
Total	**$ 11,884,200**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,828,000**	**$ 10,056,200**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 2 Clarifier No. 4 Addition	WW02CL	2027-2028	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, an additional clarifier is needed at Wastewater Treatment Facility (WWTF) No. 2.

The project includes addition of a fourth clarifier of the same size (80-ft diameter) as the three existing clarifiers, for an additional 6.0 MGD capacity and a total secondary clarification capacity of 18.0 MGD.

The results of the Sanitary Sewer Transmission Assessment and Renewal (SSTAR) Program may modify the wastewater line rehabilitation and 2-hour peak flow project prioritization.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2027	☐ DBB	☐ O&M
PSA/WO Issued:	2027	☐ CMAR	☐ Bonds
Final Proposal Docs:	2027	☑ CSP	☑ R&R
Proposals/Bids Received:	2028	☐ Other	☐ Other
Const. Contract to Board:	2028		
Substantial Completion:	2028	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 422,000									$ 422,000		
Engineering/Design	$ 422,000									$ 422,000		
Construction	$ 4,216,000										$ 4,216,000	
CPS, CM&I, and CMT	$ 422,000										$ 422,000	
Land Acquisition												
Equipment Purchase												
Total	**$ 5,482,000**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ 844,000**	**$ 4,638,000**	$ -

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Lift Station No. 2 Expansion	WWLS02	2027-2028	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, expansion of Lift Station No. 2 is needed. This project includes the expansion of Lift Station 2 firm pumping capacity from 0.49 MGD to 0.79 MGD. This project includes replacement of pumps and electrical with larger units. The hydraulic wastewater model evaluation shows the existing lift station firm capacity is insufficient to convey the modeled instantaneous peak wastewater flows.

The results of the Sanitary Sewer Transmission Assessment and Renewal (SSTAR) Program may modify the wastewater line rehabilitation and 2-hour peak flow project prioritization.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2027	☐ DBB	☐ O&M
PSA/WO Issued:	2027	☐ CMAR	☐ Bonds
Final Proposal Docs:	2027	☑ CSP	☑ R&R
Proposals/Bids Received:	2028	☐ Other	☐ Other
Const. Contract to Board:	2028		
Substantial Completion:	2028	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 48,000									$ 48,000		
Engineering/Design	$ 48,000									$ 48,000		
Construction	$ 478,000										$ 478,000	
CPS, CM&I, and CMT	$ 48,000										$ 48,000	
Land Acquisition												
Equipment Purchase												
Total	**$ 622,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 96,000**	**$ 526,000**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Lift Station No. 3 Expansion	WWLS03	2027-2028	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, expansion of Lift Station No. 3 is needed. This project includes the expansion of Lift Station 3 firm pumping capacity from 0.30 MGD to 0.43 MGD. This project includes replacement of pumps and electrical with larger units. The hydraulic wastewater model evaluation shows the existing lift station firm capacity is insufficient to convey the modeled instantaneous peak wastewater flows.

The results of the Sanitary Sewer Transmission Assessment and Renewal (SSTAR) Program may modify the wastewater line rehabilitation and 2-hour peak flow project prioritization.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2027	☐ DBB	☐ O&M
PSA/WO Issued:	2027	☐ CMAR	☐ Bonds
Final Proposal Docs:	2027	☑ CSP	☑ R&R
Proposals/Bids Received:	2028	☐ Other	☐ Other
Const. Contract to Board:	2028		
Substantial Completion:	2028	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 33,000									$ 33,000		
Engineering/Design	$ 33,000									$ 33,000		
Construction	$ 334,000										$ 334,000	
CPS, CM&I, and CMT	$ 33,000										$ 33,000	
Land Acquisition												
Equipment Purchase												
Total	**$ 433,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 66,000**	**$ 367,000**	**$ -**

* Budget includes contingency

PROJECT NAME	Project ID	FISCAL YEAR	DIVISION
Lift Station No. 8 Expansion	WWLS08	2027-2028	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, expansion of Lift Station No. 8 is needed. This project includes the expansion of Lift Station 8 firm pumping capacity from 0.21 MGD to 0.36 MGD. This project includes replacement of pumps and electrical with larger units. The hydraulic wastewater model evaluation shows the existing lift station firm capacity is insufficient to convey the modeled instantaneous peak wastewater flows.

The results of the Sanitary Sewer Transmission Assessment and Renewal (SSTAR) Program may modify the wastewater line rehabilitation and 2-hour peak flow project prioritization.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2027	☐ DBB	☐ O&M
PSA/WO Issued:	2027	☐ CMAR	☐ Bonds
Final Proposal Docs:	2027	☑ CSP	☑ R&R
Proposals/Bids Received:	2028	☐ Other	☐ Other
Const. Contract to Board:	2028		
Substantial Completion:	2028	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 32,000									$ 32,000		
Engineering/Design	$ 32,000									$ 32,000		
Construction	$ 322,000										$ 322,000	
CPS, CM&I, and CMT	$ 32,000										$ 32,000	
Land Acquisition												
Equipment Purchase												
Total	**$ 418,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 64,000**	**$ 354,000**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 2 Tertiary Filter Improvements (3rd Filter)	WW02F3	2027-2028	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

To meet projected future peak flows as identified in the 2017 Wastewater System Optimization Study, conversion of the existing sand filter to a cloth media filter is needed at Wastewater Treatment Facility (WWTF) No. 2.

The project includes the demolition, rehabilitation, and installation of a new cloth media filter to replace the existing sand filter.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2027	☐ DBB	☐ O&M
PSA/WO Issued:	2027	☐ CMAR	☐ Bonds
Final Proposal Docs:	2027	☑ CSP	☑ R&R
Proposals/Bids Received:	2028	☐ Other	☐ Other
Const. Contract to Board:	2028		
Substantial Completion:	2029	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 328,000									$ 328,000		
Engineering/Design	$ 328,000									$ 328,000		
Construction	$ 3,277,000										$ 3,277,000	
CPS, CM&I, and CMT	$ 328,000										$ 328,000	
Land Acquisition												
Equipment Purchase												
Total	**$ 4,261,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 656,000**	**$ 3,605,000**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 1 Digester 1 Replacement	WW1D1R	2028-2029	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Digester No. 1 at Wastewater Treatment Facility No. 1 was constructed in 1982. Over the course of several wastewater facility expansions, this digester has been modified numerous times to allow for its continued use. However, the digester does not perform at an efficient hydraulic capacity for the current facility operations. In addition, as the basin will be reaching the end of its effective life by 2028. Therefore, a new basin will be constructed adjacent to Digester 2 and Digester 1 will be demolished. The new basin will be designed to handle ultimate peak flow as required from the analysis performed for the 6th and Final Accounting.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	2028	☐ DBB	☐ O&M
PSA/WO Issued:	2028	☐ CMAR	☐ Bonds
Final Proposal Docs:	2028	☑ CSP	☑ R&R
Proposals/Bids Received:	2029	☐ Other	☐ Other
Const. Contract to Board:	2029		
Substantial Completion:	20230	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 210,000										$ 210,000	
Engineering/Design	$ 210,000										$ 210,000	
Construction	$ 2,101,000											$ 2,101,000
CPS, CM&I, and CMT	$ 210,000											$ 210,000
Land Acquisition												
Equipment Purchase												
Total	**$ 2,731,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 420,000**	**$ 2,311,000**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 1 Replacement of Aeration Basin Nos. 1 and 2	WWF1AB	2018-2020	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Aeration Basin Nos. 1 and 2 at Wastewater Treatment Facility (WWTF) No. 1 were part of the original plant construction in 1974. Aeration Basin 1 is currently not in operation due to poor condition, and the current treatment capacity of Aeration Basin 2 is limited due to aeration limitations. A comprehensive evaluation of WWTF No. 1 was performed in 2014. The evaluation recommended that Aeration Basin Nos. 1 and 2 be repaired or replaced and that both basins be upgraded to a more efficient fine bubble diffused aeration system. Due to structural concerns, it is envisioned that the basins will be replaced rather than repaired, therefore the proposed cost estimate is based on the replacement option.

Continued growth within The Woodlands will require these basins to be operational in the future in order to meet Texas Commission on Environmental Quality (TCEQ) discharge permit requirements.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	October 2017	☐ DBB	☐ O&M
PSA/WO Issued:	January 2018	☐ CMAR	☑ Bonds
Final Proposal Docs:	April 2020	☑ CSP	☐ R&R
Proposals/Bids Received:	June 2020	☐ Other	☐ Other
Const. Contract to Board:	August 2020		
Substantial Completion:	March 2022	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 654,000	$ 654,000										
Engineering/Design	$ 537,000	$ 537,000										
Construction	$ 9,450,000		$ 9,450,000									
CPS, CM&I, and CMT	$ 945,000		$ 945,000									
Land Acquisition												
Equipment Purchase												
Total	**$ 11,586,000**	**$ 1,191,000**	**$ 10,395,000**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
WWTF No. 1 Aeration Basin Nos. 1 and 2 Capacity Increase	WW1AB	2018-2020	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

Aeration Basin Nos. 1 and 2 at Wastewater Treatment Facility (WWTF) No. 1 were part of the original plant construction in 1974. Aeration Basin 1 is currently not in operation due to poor condition, and the current treatment capacity of Aeration Basin 2 is limited due to aeration limitations. A comprehensive evaluation of WWTF No. 1 was performed in 2014. The evaluation recommended that Aeration Basins 1 and 2 be repaired or replaced and that both basins be upgraded to a more efficient fine bubble diffused aeration system. Due to structural concerns, it is envisioned that the basins will be replaced rather than repaired, therefore the proposed cost estimate is based on the replacement option.

Continued growth within The Woodlands will require these basins to be operational in the future in order to meet Texas Commission on Environmental Quality (TCEQ) discharge permit requirements.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	October 2017	☐ DBB	☐ O&M
PSA/WO Issued:	January 2018	☐ CMAR	☐ Bonds
Final Proposal Docs:	April 2020	☑ CSP	☐ R&R
Proposals/Bids Received:	June 2020	☐ Other	☑ Other Capacity
Const. Contract to Board:	August 2020		
Substantial Completion:	March 2022	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER												
Engineering/Design	$ 117,000	$ 117,000										
Construction	$ 1,745,000		$ 1,745,000									
CPS, CM&I, and CMT	$ 175,000		$ 175,000									
Land Acquisition												
Equipment Purchase												
Total	**$ 2,037,000**	**$ 117,000**	**$ 1,920,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

* Budget includes contingency

PROJECT NAME	PROJECT ID	FISCAL YEAR	DIVISION
Water Plant No. 4 Ground Storage Tank No. 2	WA4GT2	2019 - 2020	Woodlands

PROJECT DESCRIPTION/JUSTIFICATION:

An additional Ground Storage Tank (GST) will be required at Water Plant No. 4 to provide additional storage capability. Water plants with only one tank cannot be kept in operation if the tank is out of service. Building a second tank will allow for continuous use of the water plant when maintenance or repairs are being made to either tank. Water model analysis demonstrates a critical need for continuous operation of Water Plant No. 4. If the plant is not operational, large areas within the upper and middle pressure planes would be without water.

Proposed GST No. 2 shall have a storage capacity of 2.0 million gallons, equal to GST No. 1. Two equally sized tanks will be sufficient to meet peak day demands, will simplify control settings, and will minimize call-to-run for surface water and ground water supplies, providing less wear on the supply facilities.

PROJECT MAP/PICTURE

PROJECT SCHEDULE		DELIVERY	FUNDING
Initiate Cons. Selection	October 2018	☐ DBB	☐ O&M
PSA/WO Issued:	January 2019	☐ CMAR	☐ Bonds
Final Proposal Docs:	July 2019	☑ CSP	☐ R&R
Proposals/Bids Received:	2020	☐ Other	☑ Other
Const. Contract to Board:	October 2019		Capacity
Substantial Completion:	December 2020	☑ Capitalized	☐ Expensed

BUDGET *	TOTAL	PREVIOUS	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Planning/Permitting/PER	$ 310,000	$ 310,000										
Engineering/Design	$ 310,000	$ 310,000										
Construction	$ 3,103,000		$ 3,103,000									
CPS, CM&I, and CMT	$ 310,000		$ 310,000									
Land Acquisition												
Equipment Purchase												
Total	**$ 4,033,000**	**$ 620,000**	**$ 3,413,000**	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

* Budget includes contingency