



**Capital
Improvement
Program
FY19-23+**

City of Seabrook

July 2018

ABOUT CAPITAL IMPROVEMENTS

The comprehensive Capital Improvement Program document (CIP) is a tool for planning and visualizing the capital budget. The overall goals of the CIP are to:

- Present a document that can be reviewed by staff and council in workshop to address content and priorities yearly
- Projects supported by Enterprise Fund are differentiated from the General Fund. The Enterprise Fund supports Water and Sewer projects
- Detailed project information will be included on each project showing a brief description of project, timeline, proposed funding (if currently identified) if project is approved and completed projects.

Authority

The preparation of the Capital Improvement Program is in accordance with the City Charter. It consists of a capital budget for the ensuing fiscal year and a capital improvement program for the four fiscal years following. There is also a “FY23+” column to depict additional projects that have been identified for potential longer range goals.

Seabrook City Charter

Section 5.02 (11)

A Five (5) Year Capital Program and Budget, which may be revised and extended each year to indicate capital improvements pending or in the process of construction or acquisition, and shall include the following items:

- a. *A summary of proposed programs;*
- b. *A list of all capital improvements which are proposed to be undertaken during the five (5) fiscal years next ensuing, with appropriate supporting information as to the necessity for such improvements;*
- c. *Cost estimates, method of financing and recommended time schedules for each such improvement; and*
- d. *Adoption of the budget is for the ensuing fiscal year only and does not constitute adoption for the subsequent four (4) fiscal years.*

Purpose

The Capital Improvement Program (CIP) is a recommended schedule of improvements or additions to city capital assets, including the planning and design thereof. The CIP is a 5-year plan, of which the first year represents the proposed capital budget for the current fiscal year. The remaining four years of the CIP serve as a financial plan for capital investments. The CIP will be updated annually, at which time the schedule of projects will be re-evaluated, and another fiscal year added with new projects, as appropriate.

Capital assets are comprised of facilities, infrastructure, equipment, and networks that enable or improve the delivery of public sector services. The procurement, construction, and maintenance of capital assets are critical activities in the management of those assets.

Capital projects are major projects undertaken by the City that fit one or more of the following categories:

1. Construction of new facilities or infrastructure.
2. Non-recurring rehabilitation or major repairs to a capital asset.
3. Acquisition of land for a public purpose.
4. All projects requiring debt obligation or borrowing.
5. Purchase of major equipment and vehicles meeting the threshold definition of a capital asset.
6. Any specific planning, engineering study or design work related to a project that falls in the above categories



Financing the Capital Budget

The City considers all forms of public financing when developing its CIP.

These include:

General Obligation Bonds – Bonds are the primary source of funding by which capital projects are financed and are a long term debt instrument backed by the full faith and credit of the city and issued with the guarantee that the government will use its general taxing authority to pay principal and interest payments on the debt. Seabrook citizens must vote to approve the authorization to issue GO Bonds, and once authorized, the bonds may only be used for project listed in propositions.

Revenue Bonds – Long term debt instrument secured by the revenues of the City's utilities. Revenue Bonds can only be issued for utility related capital projects and are issued with 5-20 year amortizations.

Government Loans and Grants – The City receives state grants and loans for various capital projects, including roads and community facilities.

Grants and Contributions – Funds contributed to a project via a project-specific grant program or by a local business or special interest group. This includes developer contributions, which are payments by developers for capital facilities that enhance their property.

Capital Impact Fees – A source of funding for Water and Wastewater projects only, these are user fees in the form of connection charges.

Community Development Block Grant (CDBG) Funds – Federal grant funds used primarily to facilitate the production and preservation of low and moderate income housing, but also utilized for capital projects that serve or benefit the City's low income population.

Operating Funds – Next to general obligation bonds, operating funds are the largest source of funding for capital projects. Transfer of funds from the operating (General Fund, Economic Development Fund, Parks Fund, or other special funds) to the capital budget for specific capital projects are noted in budget documents.

Role of the Master Plans in the Capital Improvement Program

The Seabrook Comprehensive Plan is the financially unconstrained long-range plan for the city. In accordance with Article XI, Section 11.24 of the Seabrook City Charter it identifies goals and policies for city land use, economic development, transportation, sensitive environmental resources, community facilities, including parks, and water resources. The Comprehensive Plan is recognized as a key component of the CIP because it assists in determining the strategic goals that the city aims to achieve over the long term via its program of capital investments. The link between the Comprehensive Plan, the Annual Strategic Plan and CIP is supported by various planning documents and studies, including functional master plans that inventory and assess particular types of physical infrastructure, identify deficiencies, and prioritize needed investments.

How to Read this Document

The sections which follow represent the capital improvement projects grouped category by schedule of funding and then in a table format that includes the funding possibilities. Additional capital needs anticipated over the long term are noted. Those potential projects may be included in the CIP in future years, depending on priorities, funding availability, and other considerations. They are included in this document to convey to City leaders and other interested parties the general parameters and breadth of upcoming capital needs.

Within each of the projects, it is further sorted into project stages by year. This allows like projects to be considered together, so as to determine overall City priorities and allow for resources to be allocated accordingly.

- **Project Planning Stage:** includes the development of the project scope, feasibility study, a design budget, and order of magnitude construction budget.
- **Design Stage:** includes the development of any environmental documents, legal documents, construction plans and specifications, and a detailed construction budget.
- **Construction Stage:** includes site preparation, utility and infrastructure placement, equipment installation, construction, and environmental mitigation.

FUNDS - OVERVIEW

The city considers all funds when developing the CIP. Sources of include operating funds (General Fund, Enterprise Fund, Economic Development Corporation, Park Improvement Fund or other special funds), General Obligation Bonds, Revenue Bonds, government loans and grants, Community Development Block Grant (CDBG) funds, revenue from fees, and revenue from Capital Impact Fees.

General Fund

Capital projects supported by the General Fund generally fall into the following categories:

- City Buildings/Facilities
- Information Technology systems and infrastructure
- Roadways, Sidewalks, and Infrastructure assets located in the public right of way
- Recreation Facilities and Parks
- Special projects addressing Economic Development, Revitalization, and Redevelopment

Capital Impact Fees Fund

The Capital Impact Fees Fund generates revenue through Water and Sewer Impact fees for funding or recouping the cost of capital improvements that have a life expectancy of five or more years, including water supply, treatment and distribution facilities and wastewater collection and treatment facilities, for new development in the city.

Capital projects supported by the Capital Impact Fees Fund generally include:

- Facility expansions, including construction, surveying and engineering, land acquisition
- Principal and interest on bonds, notes or other obligations issued by or on behalf of the city

Enterprise Fund

The Enterprise Fund supports capital projects related to the water distribution system and wastewater treatment plant. The fund's primary sources of revenue are user charges levied on water and sewer services.

The Enterprise Fund also supports the following: the Water, Sewer and Utility Billing Departments. The Enterprise fund is responsible for the end point transmission, testing, storage, and distribution of all potable water for customers of the City. The Water Department is responsible for meter reading and operating, maintaining and repairing the City's water distribution system, including service lines, water meters and fire hydrants. The Sewer Department is responsible for operating, maintaining and repairing the City's sewage conveyance system and pumping stations.

Future Projects

Project Name	Year Proposed for Funding
Commercial Road	Developer Driven Project
Humble Drive Extension	TBD
Public Safety / Court Building	FY 24+
SH 146 Beautification - Lighting	TBD
SH 146 Beautification - Gateway Signage	TBD
Fire - SCBA Replacement and Compressor	TBD
Fire - Engine Replacement	FY 24+
Fire - Traffic Emption System	TBD
Fire - Thermal Imaging Cameras	TBD
Fire - Radios	TBD



CAPITAL IMPROVEMENT PROJECT SUMMARY

CIP #	PROJECT DESCRIPTION	FUNDING	PROJECT COST						PROJECT TOTALS
			PREVIOUS	FY19	FY20	FY21	FY22	FY23+	
WATER PROJECTS									
W1	TODVILLE ROAD 12-INCH WATER LINE	TBD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,814,520	\$ 1,814,520
W2	SHIPYARDS WATER SERVICE PHASE 1	DEVELOPER	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 693,820	\$ 693,820
W3	SHIPYARDS WATER SERVICE PHASE 2	DEVELOPER	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 843,080	\$ 843,080
W4	HUMBLE DRIVE WATER PLANT RELOCATION	2016 CO	\$ 2,328,460	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,328,460
W5	TAYLOR LAKE WATER LINE CROSSING	OTHER AGENCY	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,093,800	\$ 2,093,800
W6	OLD SEABROOK WATER LINE IMPROVEMENTS	IMPACT FEES	\$ -	\$ 49,224	\$ 253,504	\$ -	\$ -	\$ -	\$ 302,728
W7	STATE HIGHWAY 146 WATER LINE IMPROVEMENTS	SIB & ENTERPRISE	\$ 128,097	\$ 1,872,021	\$ -	\$ -	\$ -	\$ -	\$ 2,000,118
W9	RED ACRES SUBDIVISION WATER LINE	IMPACT	\$ -	\$ -	\$ -	\$ -	\$ 1,363,576	\$ -	\$ 1,363,576
W10	PINE GULLY AREA WATER LINE IMPROVEMENTS	BP GRANT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,179,750	\$ 1,179,750
W11	FRIENDSHIP PARK WATER TANK REHABILITATION	ENTERPRISE	\$ -	\$ -	\$ 711,250	\$ -	\$ -	\$ -	\$ 711,250
W12	REPSDORPH WATER TANK REHABILITATION	ENTERPRISE	\$ -	\$ -	\$ -	\$ 780,313	\$ -	\$ -	\$ 780,313
W13	CHLORAMINE CONVERSION	ENTERPRISE	\$ -	\$ 272,875	\$ -	\$ -	\$ -	\$ -	\$ 272,875
W14	NASA 1 WATER LINE IMPROVEMENTS	IMPACT & FBOND	\$ -	\$ 107,056	\$ 535,280	\$ -	\$ -	\$ -	\$ 642,336
W16	OLD SH 146 INTERCONNECT	IMPACT	\$ -	\$ 124,588	\$ 622,938	\$ -	\$ -	\$ -	\$ 747,526
W17	PINE GULLY AND HESTER'S GULLY WATER LINE IMPROVEMENTS	HARRIS	\$ -	\$ 52,360	\$ 153,000	\$ -	\$ -	\$ -	\$ 205,360
W18	HESTER'S GULLY WATER LINE IMPROVEMENTS	HARRIS	\$ -	\$ 15,640	\$ 46,188	\$ -	\$ -	\$ -	\$ 61,828
TOTALS			\$ 2,456,557	\$ 2,493,764	\$ 2,322,160	\$ 780,313	\$ 1,363,576	\$ 6,624,970	\$ 16,041,340

CIP #	PROJECT DESCRIPTION	FUNDING	PREVIOUS	FY19	FY20	FY21	FY22	FY23+	
WASTEWATER PROJECTS									
WW2	SHIPYARDS SEWER SERVICE PHASE 1	DEVELOPER	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,460,763	\$ 1,460,763
WW3	SHIPYARDS SEWER SERVICE PHASE 2	DEVELOPER	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 682,500	\$ 682,500
WW4	TODVILLE SEWER LINE REPLACEMENT	2016A COS	\$ 1,359,600	\$ 247,475	\$ -	\$ -	\$ -	\$ -	\$ 1,607,075
WW6	WASTEWATER TREATMENT PLANT UPGRADES PHASE 2	2016A COS	\$ 828,400	\$ 172,600	\$ -	\$ -	\$ -	\$ -	\$ 1,001,000
WW7	RED BLUFF SANITARY SEWER EXTENSION	IMPACT FEES	\$ -	\$ -	\$ 106,800	\$ 534,000	\$ -	\$ -	\$ 640,800
WW8	STATE HIGHWAY 146 SANITARY SEWER IMPROVEMENTS	SIB	\$ 156,563	\$ 2,097,668	\$ -	\$ -	\$ -	\$ -	\$ 2,254,231
WW9	PINE GULLY WASTEWATER TREATMENT PLANT PHASE 1A	2016A COS & IMPACT	\$ 511,936	\$ 2,748,198	\$ 1,151,806	\$ -	\$ -	\$ -	\$ 4,411,940
WW10	PINE GULLY WASTEWATER TREATMENT PLANT PHASE 1B	BP GRANT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,231,250	\$ 4,231,250
WW11	PINE GULLY WASTEWATER TREATMENT PLANT PHASE 2	BP GRANT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 23,895,840	\$ 23,895,840
WW12	PINE GULLY WASTEWATER TREATMENT PLANT PHASE 3	BP GRANT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,897,600	\$ 24,897,600
WW13	PINE GULLY WASTEWATER TREATMENT PLANT PHASE 4	BP GRANT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 728,650	\$ 728,650
WW14	LIFT STATION NO 5 FORCE MAIN IMPROVEMENT		\$ -	\$ -	\$ -	\$ -	\$ 601,380	\$ -	\$ 601,380
WW15	CLARIFIER AT MAIN STREET WWTP		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 823,500	\$ 823,500
TOTALS			\$ 2,856,499	\$ 5,265,941	\$ 1,258,606	\$ 534,000	\$ 601,380	\$ 56,720,103	\$ 67,236,528

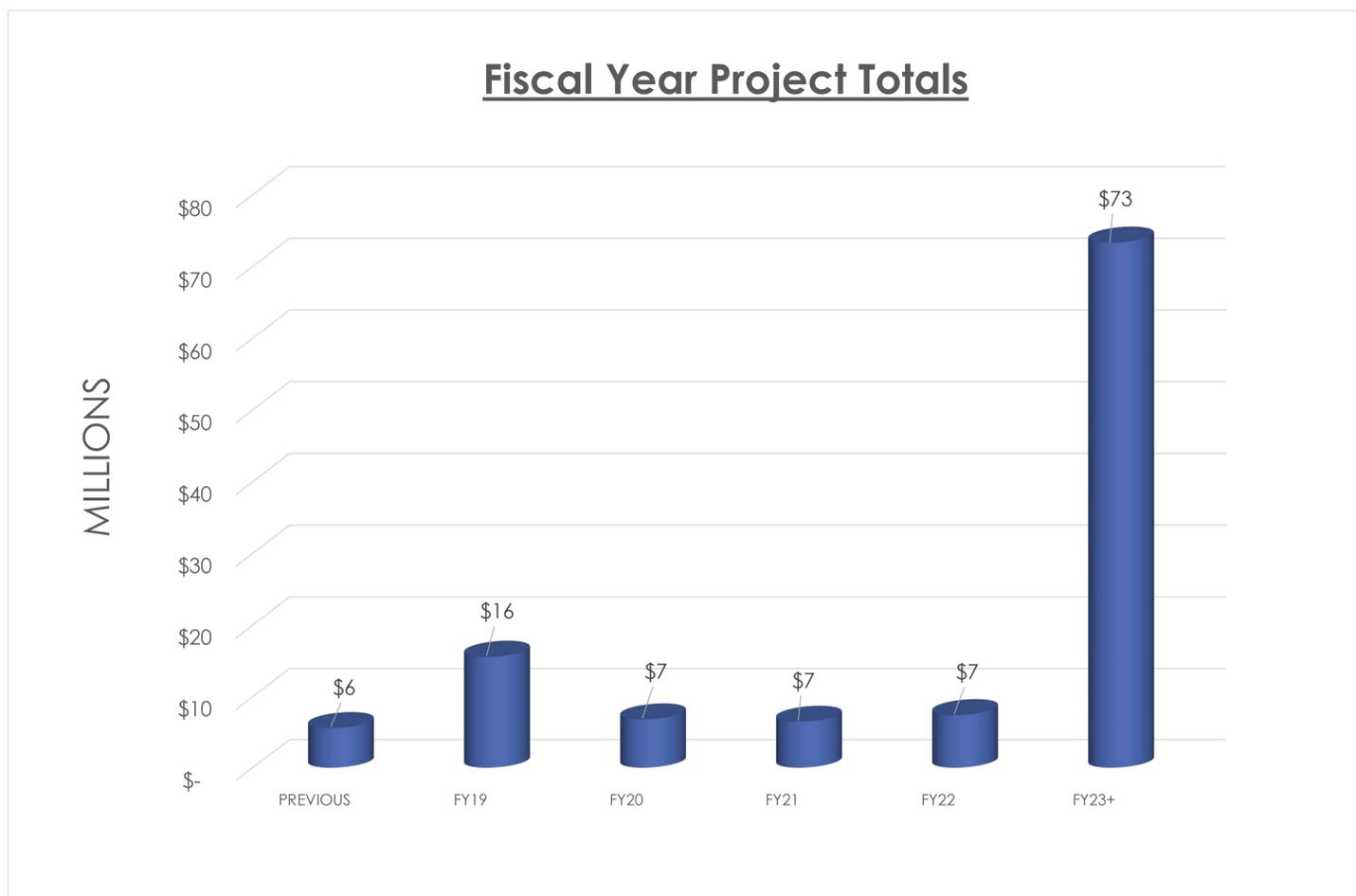
CIP #	PROJECT DESCRIPTION	FUNDING	PREVIOUS	FY19	FY20	FY21	FY22	FY23+	
DRAINAGE PROJECTS									
D1	TODVILLE ROAD BRIDGE	HARRIS COUNTY	\$ -	\$ 4,112,418	\$ -	\$ -	\$ -	\$ -	\$ 4,112,418
D2	EL MAR DITCH	DEVELOPER	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,851,140	\$ 4,851,140
D4	WILDLIFE PARK DRAINAGE EXPANSION	IMPACT & FBOND	\$ -	\$ -	\$ 114,095	\$ 671,148	\$ -	\$ -	\$ 785,243
D5	BAYBROOK SECTION 1 - DRAINAGE IMPROVEMENTS	FBONDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,188,024	\$ 1,188,024
D6	LOWER PINE GULLY DRAINAGE IMPROVEMENTS	BP GRANT	\$ -	\$ -	\$ -	\$ 518,499	\$ 2,273,994	\$ -	\$ 2,792,493
D7	HESTER'S GULLY DRAINAGE IMPROVEMENTS	GRANT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
D8	SURF OAKS DRIVE	ENTERPRISE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 345,800	\$ 345,800
D9	DU LAC TRACE, ORLEANS LN, WATER WAY & SEASCAPE	IMPACT & ENTER	\$ -	\$ 258,375	\$ -	\$ -	\$ -	\$ -	\$ 258,375
D10	BAYWOOD BRIDGE IMPROVEMENTS	HARRIS COUNTY	\$ -	\$ -	\$ 185,000	\$ 635,500	\$ -	\$ -	\$ 820,500
TOTALS			\$ -	\$ 4,370,793	\$ 299,095	\$ 1,825,147	\$ 2,273,994	\$ 6,384,964	\$ 15,153,993

CIP #	PROJECT DESCRIPTION	FUNDING	PREVIOUS	FY19	FY20	FY21	FY22	FY23+	
STREET PROJECTS									
S2	BAYBROOK SECTION 1 - CEDARBROOK CT	SANIT FRANCHISE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
S3	BAYBROOK SECTION 1 - BROOKWOOD CT	SANIT FRANCHISE	\$ 306,772	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 306,772
S4	MIRAMAR STREETS - DOLPHIN DRIVE	FBONDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 748,471	\$ 748,471
S5	MIRAMAR STREETS - CAPRI LANE	FBONDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 741,490	\$ 741,490
S6	MIRAMAR STREETS - BIMINI WAY	FBONDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 746,924	\$ 746,924
S7	MIRAMAR STREETS - ASPEN LANE	FBONDS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 751,843	\$ 751,843
S8	SEASCAPE II STREET IMPROVEMENTS	FBONDS	\$ -	\$ -	\$ 2,574,748	\$ 1,839,106	\$ -	\$ -	\$ 4,413,855
S9	BAYBROOK SECTION III STREET IMPROVEMENTS	FBONDS	\$ -	\$ -	\$ -	\$ 1,479,418	\$ 2,465,696	\$ -	\$ 3,945,114
S10	MARVIN CIRCLE		\$ -	\$ 254,961	\$ -	\$ -	\$ -	\$ -	\$ 254,961
TOTALS			\$ 306,772	\$ 254,961	\$ 2,574,748	\$ 3,318,524	\$ 2,465,696	\$ 2,988,729	\$ 11,909,431

CIP #	PROJECT DESCRIPTION	FUNDING	PREVIOUS	FY19	FY20	FY21	FY22	FY23+	
FACILITY PROJECTS									
FAC1	SCADA SYSTEM UPGRADES	2016 CO & SWIFT	\$ -	\$ 446,000	\$ 395,651	\$ -	\$ -	\$ -	\$ 841,651
FAC2	CITY HALL PARKING LOT	GENERAL FUND	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 219,324	\$ 219,324
FAC4	MIRAMAR PARK PARKING LOT	GENERAL & PARK	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 399,345	\$ 399,345
FAC6	SMART WATER METER CONVERSION	2016A SURPLUS	\$ -	\$ 2,162,556	\$ -	\$ -	\$ -	\$ -	\$ 2,162,556
FAC7	PUBLIC SAFETY INSPECTION AREA (SH 146)	FUND 28 GEN	\$ -	\$ 326,294	\$ -	\$ -	\$ -	\$ -	\$ 326,294
FAC8	VOLUNTEER FIRE DEPARTMENT FLOOR COATING	FUND 28 GEN	\$ -	\$ 80,000	\$ -	\$ -	\$ -	\$ -	\$ 80,000
FAC9	CITY HALL COUNCIL CHAMBERS	COURT FUNDS	\$ -	\$ 37,500	\$ -	\$ -	\$ -	\$ -	\$ 37,500
FAC10	WATER WELLS FIBER CONDUIT	FUND 28 GEN & FD 31	\$ -	\$ 110,000	\$ -	\$ -	\$ -	\$ -	\$ 110,000
FAC11	WATER WELLS FIBER CONDUIT	FUND 28 GEN	\$ -	\$ 60,000	\$ -	\$ -	\$ -	\$ -	\$ 60,000
TOTALS			\$ -	\$ 3,222,350	\$ 395,651	\$ -	\$ -	\$ 618,669	\$ 4,236,669

CIP #	PROJECT DESCRIPTION	FUNDING	PREVIOUS	FY19	FY20	FY21	FY22	FY23+	
PARK PROJECTS									
P1	PINE GULLY HIKE AND BIKE TRAIL	BP GRANT	\$ -	\$ -	\$ -	\$ 60,000	\$ 749,400	\$ -	\$ 809,400
P2	E MEYER HIKE AND BIKE TRAIL	UNFUNDED	\$ -						\$ 381,754
P3	PINDO PALMS	GENERAL FUND	\$ -						\$ 15,000
P4	BAYBROOK TENNIS & BASKETBALL COURT	PARK IMPACT	\$ -						\$ 50,000
P5	ROBINSON PARK PARKING LOT	PARK IMPACT & FD 28	\$ -						\$ 18,000
P6	WILDLIFE PARK PLAYGROUND EQUIPMENT	TBD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40,000
P7	MEADOR PARK TRAIL LIGHTS	TBD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45,000
P8	BAYSIDE KAYAK LAUNCH	TBD	\$ -						\$ 20,000
P9	TAYLOR LAKE KAYAK	TBD	\$ -						\$ 50,000
TOTAL PARK PROJECTS			\$ -	\$ -	\$ -	\$ 60,000	\$ 749,400	\$ -	\$ 1,429,154

CIP #	PROJECT DESCRIPTION	FUNDING	PREVIOUS	FY19	FY20	FY21	FY22	FY23+	
EDC PROJECTS									
EDC1	STARBOARD ROAD (RED BLUFF EXTENSION)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,744,093	\$ 2,744,093
TOTAL EDC PROJECTS			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,744,093
TOTAL COST PER YEAR			\$ 5,619,828	\$ 15,607,809	\$ 6,850,261	\$ 6,517,983	\$ 7,454,046	\$ 73,337,434	\$ 118,751,208



PROPOSED WATER PROJECTS

FY19 – FY23+

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: TODVILLE ROAD 12-INCH WATER LINE
Project Location/Limits: RED BLUFF ROAD TO PORT ROAD
CIP Number: W1
Facility Type: WATER

Project Description and Justification

This line provides additional capacity for water supply from the City of Pasadena. The City currently has an 8-Inch WL in this location now. This is an alternate feed point for water from the City of Pasadena. The primary source enters Seabrook via a 24-Inch waterline along the Taylor Lake Bridge on Red Bluff Road. The project extends beyond the city limits, but recognizes that Pasadena is unlikely to provide any improvements other than what is installed to serve the Port of Houston.

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22+	FY23+	
Engineering/Planning	\$ -					\$ 225,000	\$ 225,000
Land/Easements Acq.	\$ -						\$ -
Construction	\$ -					\$ 1,589,520	\$ 1,589,520
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,814,520	\$ 1,814,520

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)						\$ 1,814,520.00	\$ 1,814,520
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,814,520	\$ 1,814,520

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
12-Inch PVC Water Line	7500	LF	\$ 90.00	\$ 675,000.00
12-Inch PVC Water Line (Trenchless)	500	LF	\$ 120.00	\$ 60,000.00
20-Inch HDPE Directional Drilled	550	LF	\$ 320.00	\$ 176,000.00
12-Inch Gate Valves	18	EA	\$ 2,000.00	\$ 36,000.00
8-Inch Gate Valves	15	EA	\$ 1,200.00	\$ 18,000.00
8-Inch Vault/Meter/Check Valve	1	EA	\$ 50,000.00	\$ 50,000.00
Fire Hydrant Assemblies	25	EA	\$ 4,500.00	\$ 112,500.00
Water Services	8	EA	\$ 1,200.00	\$ 9,600.00
Dewatering	7500	LF	\$ 25.00	\$ 187,500.00
Project Contingencies (20%)				\$ 264,920.00
Construction Total				\$ 1,589,520.00

Comments/Special Project Notes:



0 500' 1000'
SCALE: 1" = 500'

W1
TODVILLE ROAD 12-INCH
WATER LINE

CobbFendley
Texas Registration No. 274
1920 Country Place Parkway, Suite 310
Pearland, Texas 77564
281.993.4952 | fax 281.993.8086
www.cobbfendley.com



YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: SHIPYARDS WATER SERVICE PHASE 1
Project Location/Limits: TODVILLE ROAD TO JENNINGS ISLAND (UNDER SH146)
CIP Number: W2
Facility Type: WATER

Project Description and Justification

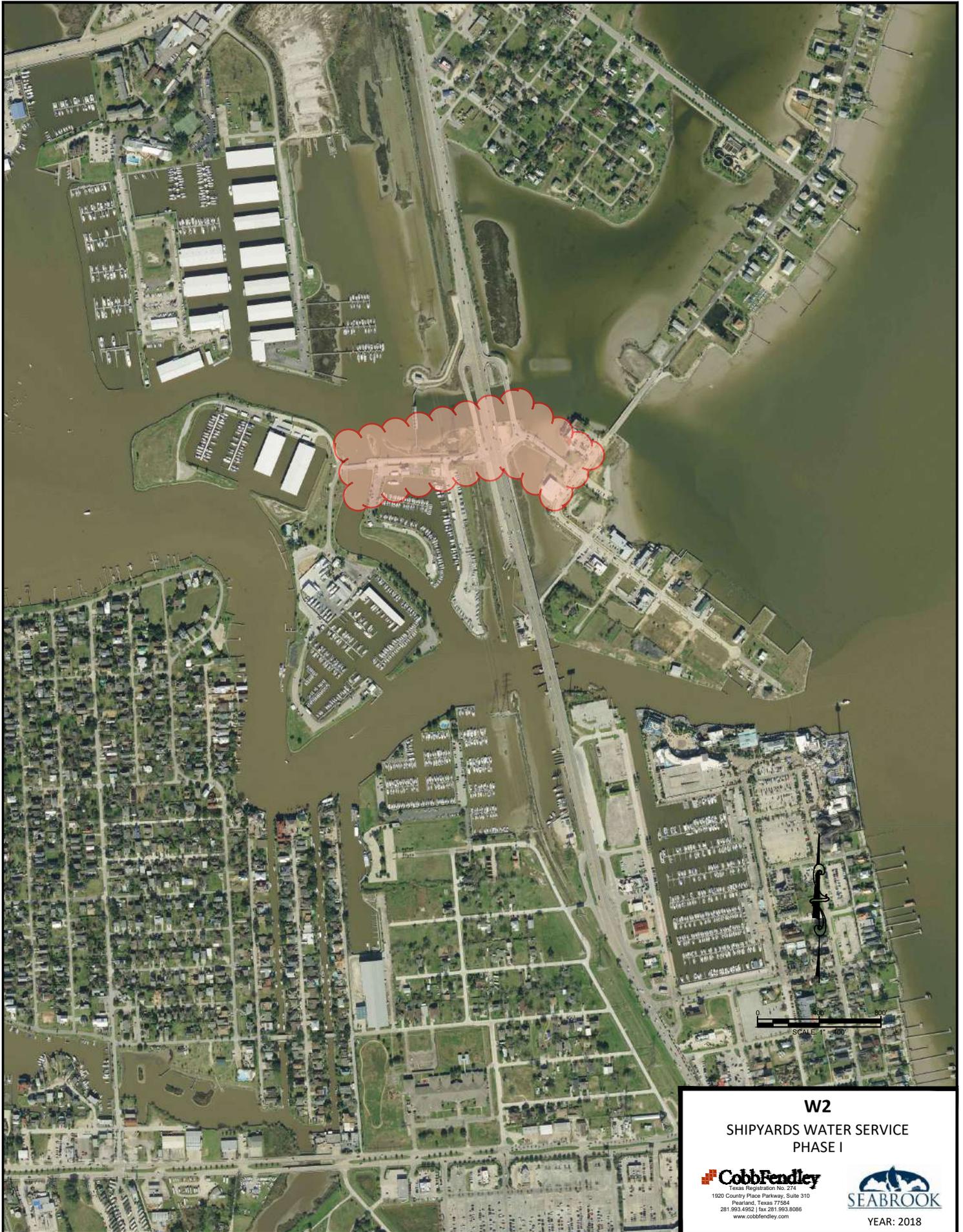
The Shipyards (Jennings Island) is a very poorly served area with much of it still on water wells. This project would provide city water services to the area and provide for future development in the area.

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 98,500	\$ 98,500
Land/Easements Acq.						\$ 60,000	\$ 60,000
Construction						\$ 535,320	\$ 535,320
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 693,820	\$ 693,820

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution						\$ 693,820	\$ 693,820
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 693,820	\$ 693,820

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
12-Inch PVC Water Line	400	LF	\$ 90.00	\$ 36,000.00
12-Inch PVC Water Line (Trenchless)	100	LF	\$ 120.00	\$ 12,000.00
12-Inch Bore & Jacked (20" Casing)	400	LF	\$ 400.00	\$ 160,000.00
20-Inch HDPE Directional Drilled	600	LF	\$ 320.00	\$ 192,000.00
12-Inch Gate Valves	5	EA	\$ 2,000.00	\$ 10,000.00
Fire Hydrant Assemblies	5	EA	\$ 4,500.00	\$ 22,500.00
Water Services	3	EA	\$ 1,200.00	\$ 3,600.00
Dewatering	400	LF	\$ 25.00	\$ 10,000.00
Project Contingencies (20%)				\$ 89,220.00
Construction Total				\$ 535,320.00

Comments/Special Project Notes:



W2
SHIPYARDS WATER SERVICE
PHASE I

CobbFendley
Texas Registration No. 274
1920 Country Place Parkway, Suite 310
Pasland, Texas 77564
281.993.4952 | fax 281.993.8086
www.cobbhendley.com



YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: SHIPYARDS WATER SERVICE PHASE 2
Project Location/Limits: EAST SIDE OF JENNINGS BRIDGE TO WEST AND SOUTHERN EXTENTS OF THE ISLAND
CIP Number: W3
Facility Type: WATER

Project Description and Justification

This project would provide adequate supply for firefighting within the Shipyards, as well as provide the means to support economic development within the area.

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 110,000	\$ 110,000
Land/Easements Acq.						\$ 30,000	\$ 30,000
Construction						\$ 703,080	\$ 703,080
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 843,080	\$ 843,080

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution						\$ 843,080	\$ 843,080
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 843,080	\$ 843,080

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
12-Inch PVC Water Line	3600	LF	\$ 90.00	\$ 324,000.00
20-Inch HDPE Directional Drilled	250	LF	\$ 320.00	\$ 80,000.00
12-Inch Gate Valves	8	EA	\$ 2,000.00	\$ 16,000.00
Fire Hydrant Assemblies	15	EA	\$ 4,500.00	\$ 67,500.00
Water Services	7	EA	\$ 1,200.00	\$ 8,400.00
Dewatering	3600	LF	\$ 25.00	\$ 90,000.00
Project Contingencies (20%)				\$ 117,180.00
Construction Total				\$ 703,080.00

Comments/Special Project Notes:

Project is dependent on W2 being completed or under construction.



W3
SHIPYARDS WATER SERVICE
PHASE II

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www.cobbhendley.com



YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: TAYLOR LAKE WATER LINE CROSSING
Project Location/Limits: ALONG RED BLUFF ROAD BRIDGE ACROSS TAYLOR LAKE
CIP Number: W5
Facility Type: WATER

Project Description and Justification

This project is not properly categorized as a City CIP Project. The line segment is owned by the City of Pasadena and should be properly maintained by Pasadena, but due to its current condition, it has been poorly maintained. The line was originally installed by the City of Seabrook but traded to the City of Pasadena years ago as part of a service arrangement with Pasadena. The line is of critical importance to the City of Seabrook, but no importance to Pasadena and is therefore not well maintained.

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 325,000	\$ 325,000
Land/Easements Acq.						\$ 150,000	\$ 150,000
Construction						\$ 1,618,800	\$ 1,618,800
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,093,800	\$ 2,093,800

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)						\$ 2,093,800	\$ 2,093,800
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,093,800	\$ 2,093,800

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
24-Inch PVC Water Line	800	LF	\$ 300.00	\$ 240,000.00
32-Inch HDPE Directional Drilled	1700	LF	\$ 600.00	\$ 1,020,000.00
24-Inch Valves	2	EA	\$ 4,500.00	\$ 9,000.00
Relocate Metering Station	1	LS	\$ 40,000.00	\$ 40,000.00
Dewatering	800	LF	\$ 50.00	\$ 40,000.00
Project Contingencies (20%)				\$ 269,800.00
Construction Total				\$ 1,618,800.00

Comments/Special Project Notes:

The aerial crossing attached to the Taylor Lake Bridge suffers from corrosion and the lack of maintenance subjects the City of Seabrook to the likelihood of perforations and service downtime. This project would replace the existing aerial crossing with an underground, directional drilled



W5
TAYLOR LAKE WATER LINE
CROSSING

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: OLD SEABROOK WATER LINE IMPROVEMENTS
Project Location/Limits: ALONG 1ST STREET FROM SH146 TO NORTH MEYER, ANDERS FROM 1ST STREET TO ELEM. SCHOOL
CIP Number: W6
Facility Type: WATER

Project Description and Justification

The water line along 1st Street and Anders is old asbestos cement pipe and is in need of being replaced. The water line along 1st Street will be upsized from an 8-Inch line to a 12-Inch line to provide increased capacity and provide options for the PW Department to isolate and redirect lines as conditions arise.

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning		\$ 49,224	\$ -				\$ 49,224
Land/Easements Acq.							\$ -
Construction			\$ 253,504				\$ 253,504
Total Cost	\$ -	\$ 49,224	\$ 253,504	\$ -	\$ -	\$ -	\$ 302,728

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees	\$ -	\$ 49,224	\$ 253,504				\$ 302,728
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ 49,224	\$ 253,504	\$ -	\$ -	\$ -	\$ 302,728

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
Old Seabrook				
8-Inch PVC Water Line	390	LF	\$ 50.00	\$ 19,500.00
12-Inch PVC Water Line	850	LF	\$ 90.00	\$ 76,500.00
12-Inch PVC Water Line (Trenchless)	500	LF	\$ 120.00	\$ 60,000.00
Wet Connection to Existing 12" WL	1	EA	\$ 3,500.00	\$ 3,500.00
12-Inch Gate Valves	4	EA	\$ 2,000.00	\$ 8,000.00
8-Inch Gate Valves	3	EA	\$ 1,200.00	\$ 3,600.00
Fire Hydrant Assemblies	4	EA	\$ 4,500.00	\$ 18,000.00
Water Services	8	EA	\$ 2,000.00	\$ 16,000.00
Project Contingencies (20%)				\$ 41,020.00
Construction Total				\$ 246,120.00

Comments/Special Project Notes:

Project should be started once SH146 utility adjustments are under construction or completed. Project construction does not include crossing under SH 146, see CIP W7.



W6
OLD SEABROOK WATER LINE
IMPROVEMENTS

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: STATE HIGHWAY 146 WATER LINE IMPROVEMENTS
Project Location/Limits: FROM NASA RD 1 TO 400FT SOUTH OF BAYVIEW DRIVE ALONG STATE HIGHWAY 146
CIP Number: W7
Facility Type: WATER

Project Description and Justification

The purpose of this project is to relocate the existing water line facilities with the existing TxDOT SH146 ROW to a location outside of the newly proposed highway improvements. Improvements and extensions of services in areas that were not provided before will be included.

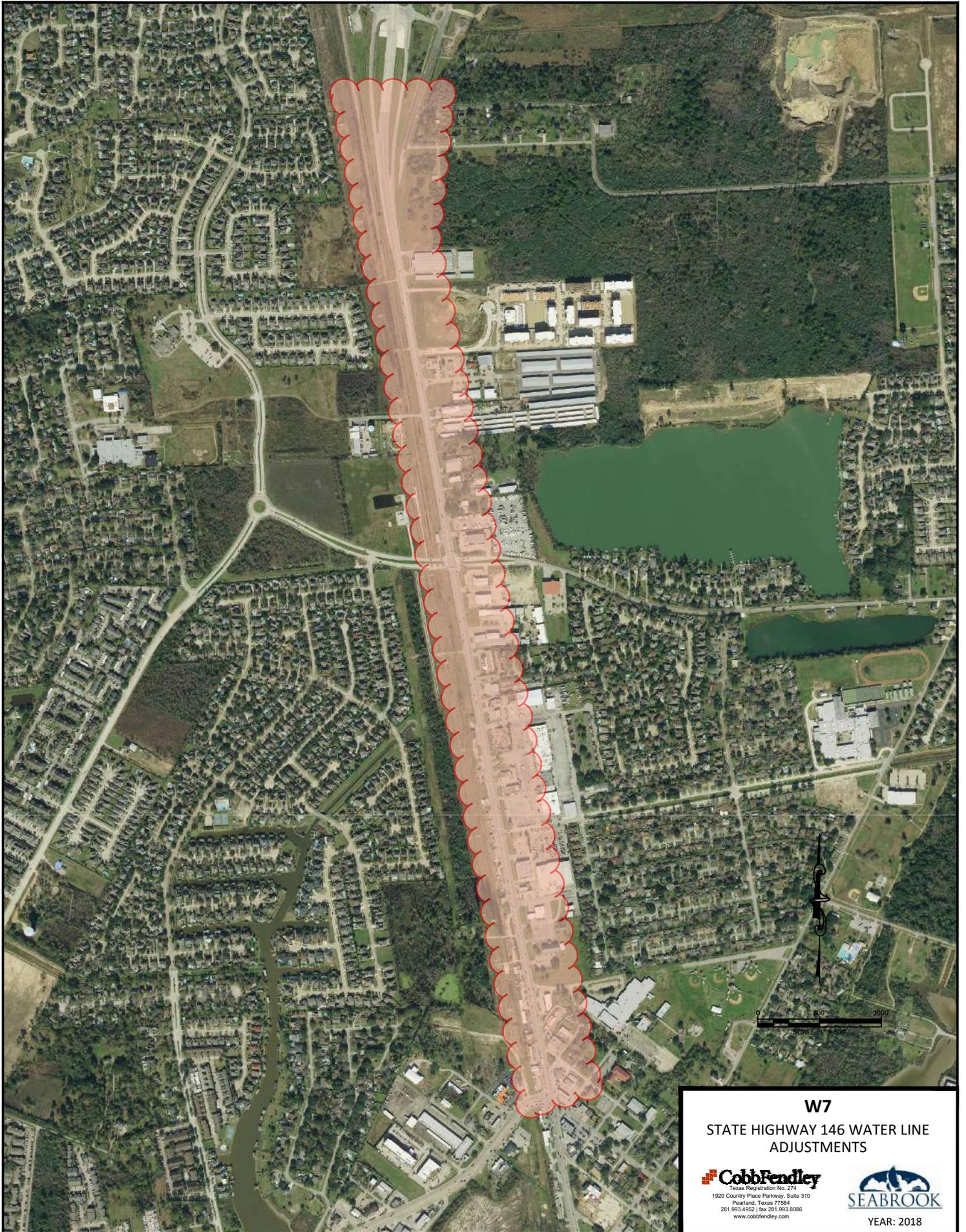
Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning	\$ 128,097	\$ 137,665					\$265,762
Land/Easements Acq.							\$ -
Construction	\$ -	\$ 1,734,356					\$ 1,734,356
Total Cost	\$ 128,097	\$ 1,872,021	\$ -	\$ -	\$ -	\$ -	\$ 2,000,118

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash	\$ 128,097	\$ 137,665					\$ 265,762
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: __sib_ (Fund/Agency)	\$ -	\$ 1,734,356	\$ -	\$ -			\$ 1,734,356
Total Funding	\$ 128,097	\$ 1,872,021	\$ -	\$ -	\$ -	\$ -	\$ 2,000,118

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
Trench Excavation Protection	18505	LF	\$ 8.00	\$ 148,040.00
6-Inch PVC Water Line	60	LF	\$ 78.00	\$ 4,680.00
8-Inch PVC Water Line	1485	LF	\$ 92.00	\$ 136,620.00
10-Inch PVC Water Line	40	LF	\$ 97.00	\$ 3,880.00
12-Inch PVC Water Line	8626	LF	\$ 110.00	\$ 948,860.00
12-Inch Restrained Joint	754	LF	\$ 141.00	\$ 106,314.00
22-Inch Steel Casing	724	LF	\$ 725.00	\$ 524,900.00
2-Inch Wet Connection	1	EA	\$ 1,600.00	\$ 1,600.00
6-Inch Wet Connection	3	EA	\$ 2,000.00	\$ 6,000.00
8-Inch Wet Connection	2	EA	\$ 2,200.00	\$ 4,400.00
10-Inch Wet Connection	1	EA	\$ 2,500.00	\$ 2,500.00
12-Inch Wet Connection	8	EA	\$ 3,500.00	\$ 28,000.00
Fire Hydrant Assembly	35	EA	\$ 2,500.00	\$ 87,500.00
Water Meter and Vault	14	EA	\$ 675.00	\$ 9,450.00
6-Inch Cut & Plug Water Line	2	EA	\$ 1,700.00	\$ 3,400.00
8-Inch Cut & Plug Water Line	2	EA	\$ 1,900.00	\$ 3,800.00
10-Inch Cut & Plug Water Line	1	EA	\$ 2,200.00	\$ 2,200.00
12-Inch Cut & Plug Water Line	7	EA	\$ 3,500.00	\$ 24,500.00
Remove & Salvage Fire Hydrant	7	EA	\$ 503.00	\$ 3,521.00
Construction Total				\$ 2,050,165.00

Comments/Special Project Notes:

The plan is to include these utility improvements with the TxDOT plans for their contractor to install, instead of the City bidding it out as a separate project. The benefit to this approach is that it will eliminate the unknown timing of each property acquisition where the new utilities will be laid. From Towers Blvd to Bayview Dr., the City currently has easement rights. TxDOT will compensate for the easement and utility relocation cost.



W7
STATE HIGHWAY 146 WATER LINE
ADJUSTMENTS

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: RED ACRES SUBDIVISION WATER LINE
Project Location/Limits: RED BLUFF ROAD TO LOGANBERRY CIRCLE
CIP Number: W9
Facility Type: WATER

Project Description and Justification

The City currently has a 6-inch water line in this location. The water modeling suggests that this area is underserved in its capacity to supply fire flow at 2500 gpm. Two things contribute to this insufficiency: a water line arrangement that limits supply efficiency and an aged 6" water line that limits capacity.

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning				\$-	\$ 208,003		\$208,003
Land/Easements Acq.							\$ -
Construction					\$ 1,155,573		\$ 1,155,573
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ 1,363,576	\$ -	\$ 1,363,576

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash					\$ 208,003		\$ 208,003
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: __Cap improvement__					\$ 1,155,573		\$ 1,155,573
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ 1,363,576	\$ -	\$ 1,363,576

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Red Bluff Crossing (Phase 1)				
Mobilization	1	LS	\$ 4,000.00	\$ 4,000.00
Remove & Replace Existing Sidewalk	1000	SF	\$ 10.00	\$ 10,000.00
12-Inch PVC Water Line (Trenchless)	160	LF	\$ 125.00	\$ 20,000.00
12-Inch PVC Water Line (Open Cut)	380	LF	\$ 90.00	\$ 34,200.00
12-Inch Gate Valve & Box	1	EA	\$ 2,000.00	\$ 2,000.00
Short Side Water Service Line and Connection	2	EA	\$ 500.00	\$ 1,000.00
Fire Hydrant Assembly	2	EA	\$ 4,250.00	\$ 8,500.00
12-Inch Wet Connection	2	EA	\$ 3,000.00	\$ 6,000.00
Erosion/Sediment Control	1	LS	\$ 2,000.00	\$ 2,000.00
SWPPP Inspection and Maintenance	1	LS	\$ 1,500.00	\$ 1,500.00
Reinforced Filter Fabric Fence	100	LF	\$ 2.00	\$ 200.00
Sodding for Erosion Control	250	SY	\$ 5.00	\$ 1,250.00
Traffic Control and Regulation	1	LS	\$ 3,000.00	\$ 3,000.00
Project Contingencies (15%)				\$ 14,047.50
Red Bluff Crossing Subtotal				\$ 107,697.50
Loganberry Circle (Phase 2)				
12-Inch PVC Water Line	275	LF	\$ 90.00	\$ 24,750.00
12-Inch PVC Water Line (Trenchless)	5230	LF	\$ 120.00	\$ 627,600.00
12-Inch Water Inside 24" Casing	70	LF	\$ 675.00	\$ 47,250.00
12-Inch Gate Valves	12	EA	\$ 2,000.00	\$ 24,000.00
6-Inch Gate Valves	9	EA	\$ 1,100.00	\$ 9,900.00
Fire Hydrant Assemblies	7	EA	\$ 4,500.00	\$ 31,500.00
Water Services	59	EA	\$ 1,200.00	\$ 70,800.00
Cap and Plug Existing 6" Waterline	1	LS	\$ 2,500.00	\$ 2,500.00
Project Contingencies (25%)				\$ 209,575.00

Loganberry Circle Subtotal

\$ 1,047,875.00

Construction Total

\$ 1,155,572.50

Comments/Special Project Notes:

Phase 1 is anticipated for construction in Summer 2018.



W9
RED ACRES SUBDIVISION
WATER LINE

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: PINE GULLY WATER LINE IMPROVEMENTS
Project Location/Limits: PINE GULLY, SURF OAKS, CASA MARE, FLAMINGO DR.
CIP Number: W10
Facility Type: WATER

Project Description and Justification

This area is mostly served by single-strand 6-inch water lines. From our water model, it can be observed that the infrastructure is insufficient to supply fire flow at 2500 gpm. By upsizing these 6" water lines to 8" water lines, there will be sufficient capacity to this area.

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 166,000	\$ 166,000
Land/Easements Acq.							\$ -
Construction						\$ 1,013,750	\$ 1,013,750
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,179,750	\$ 1,179,750

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)						\$ 1,179,750.00	\$ 1,179,750
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,179,750	\$ 1,179,750

Description	Opinion of Probable Construction Cost Estimate			Total Cost
	Quantity	Unit	Unit Price	
8-Inch PVC Water Line	8600	LF	\$ 50.00	\$ 430,000.00
8-Inch Gate Valves	10	EA	\$ 1,200.00	\$ 12,000.00
Fire Hydrant Assemblies	22	EA	\$ 4,500.00	\$ 99,000.00
Water Services	10	EA	\$ 1,200.00	\$ 12,000.00
Plug and Abandon 6" Waterline	8600	LF	\$ 5.00	\$ 43,000.00
Dewatering	8600	LF	\$ 25.00	\$ 215,000.00
Project Contingencies (25%)				\$ 202,750.00
Construction Total				\$ 1,013,750.00

Comments/Special Project Notes:

These areas were included based on the water model that was done as part of the impact fee study.



W10
PINE GULLY WATER LINE
REPLACEMENT

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: FRIENDSHIP PARK WATER TANK REHABILITATION
Project Location/Limits: ELEVATED STORAGE TANK
CIP Number: W11
Facility Type: WATER TANK

Project Description and Justification

To ensure the public water supply storage tanks are in safe and productive working order and in compliance with the TCEQ & EPA environmental rules and regulations. The project will include replacing protective coating systems and performing minor structural repairs.

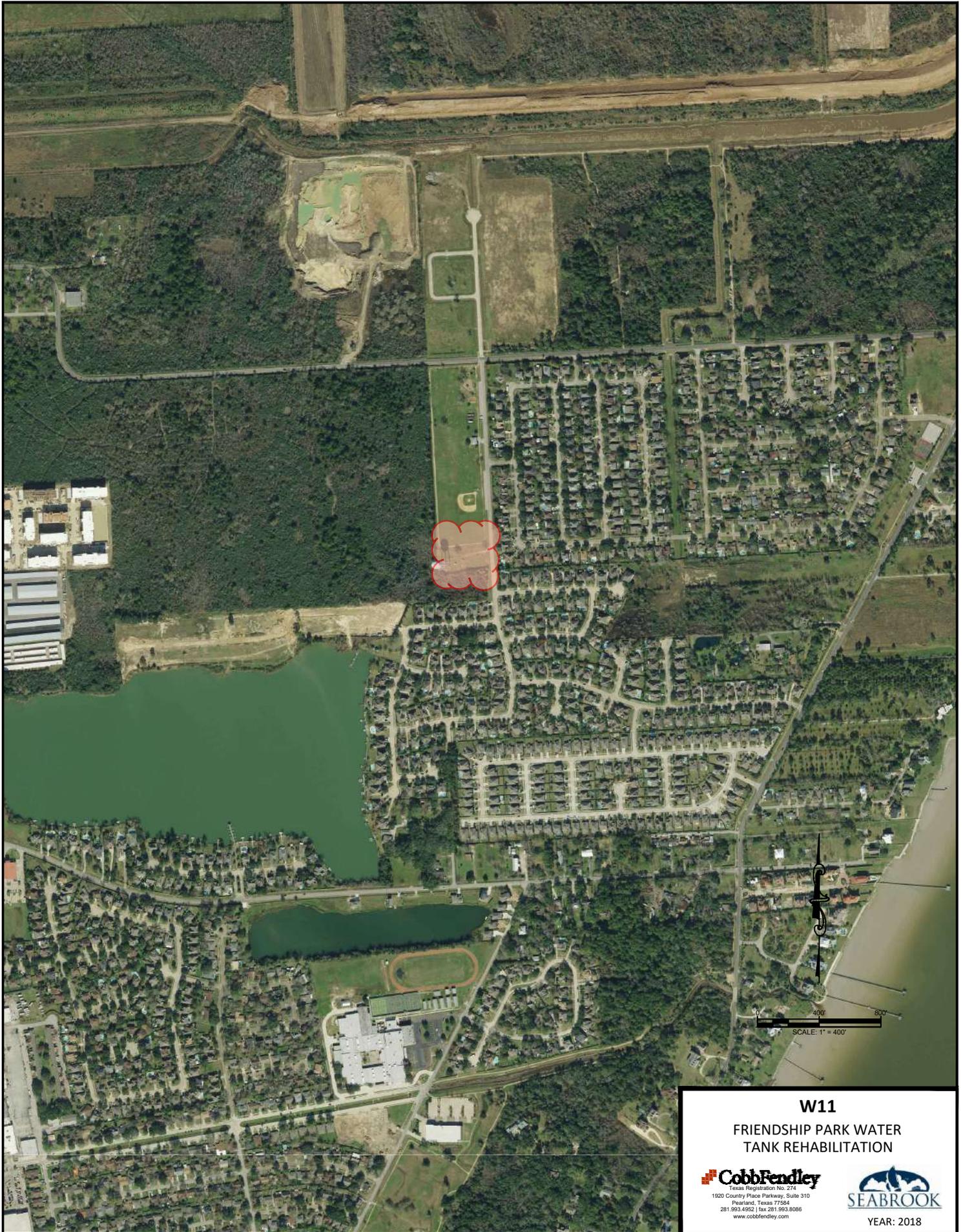
Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning			\$ 55,000				\$ 55,000
Land/Easements Acq.							\$ -
Construction			\$ 656,250	\$ -			\$ 656,250
Total Cost	\$ -	\$ -	\$ 711,250	\$ -	\$ -	\$ -	\$ 711,250

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash			\$ 711,250				\$ 711,250
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ 711,250	\$ -	\$ -	\$ -	\$ 711,250

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
Interior Steel	10000	SF	\$ 10.00	\$ 100,000.00
Dehumidification and Disposal	1	LS	\$ 60,000.00	\$ 60,000.00
Exterior Steel	20000	SF	\$ 10.00	\$ 200,000.00
Shroud and Disposal	1	LS	\$ 110,000.00	\$ 110,000.00
Structural Allowance	1	LS	\$ 30,000.00	\$ 30,000.00
Project Contingencies (25%)				\$ 125,000.00
Construction Total				\$ 625,000.00

Comments/Special Project Notes:

Above estimate provided based on current DEI inspection reports.



W11
FRIENDSHIP PARK WATER
TANK REHABILITATION

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: REPSDORPH WATER TANK REHABILITATION
Project Location/Limits: ELEVATED STORAGE TANK
CIP Number: W12
Facility Type: WATER TANK

Project Description and Justification

To ensure the public water supply storage tanks are in safe and productive working order and in compliance with the TCEQ & EPA environmental rules and regulations. The project will include replacing protective coating systems and performing minor structural repairs.

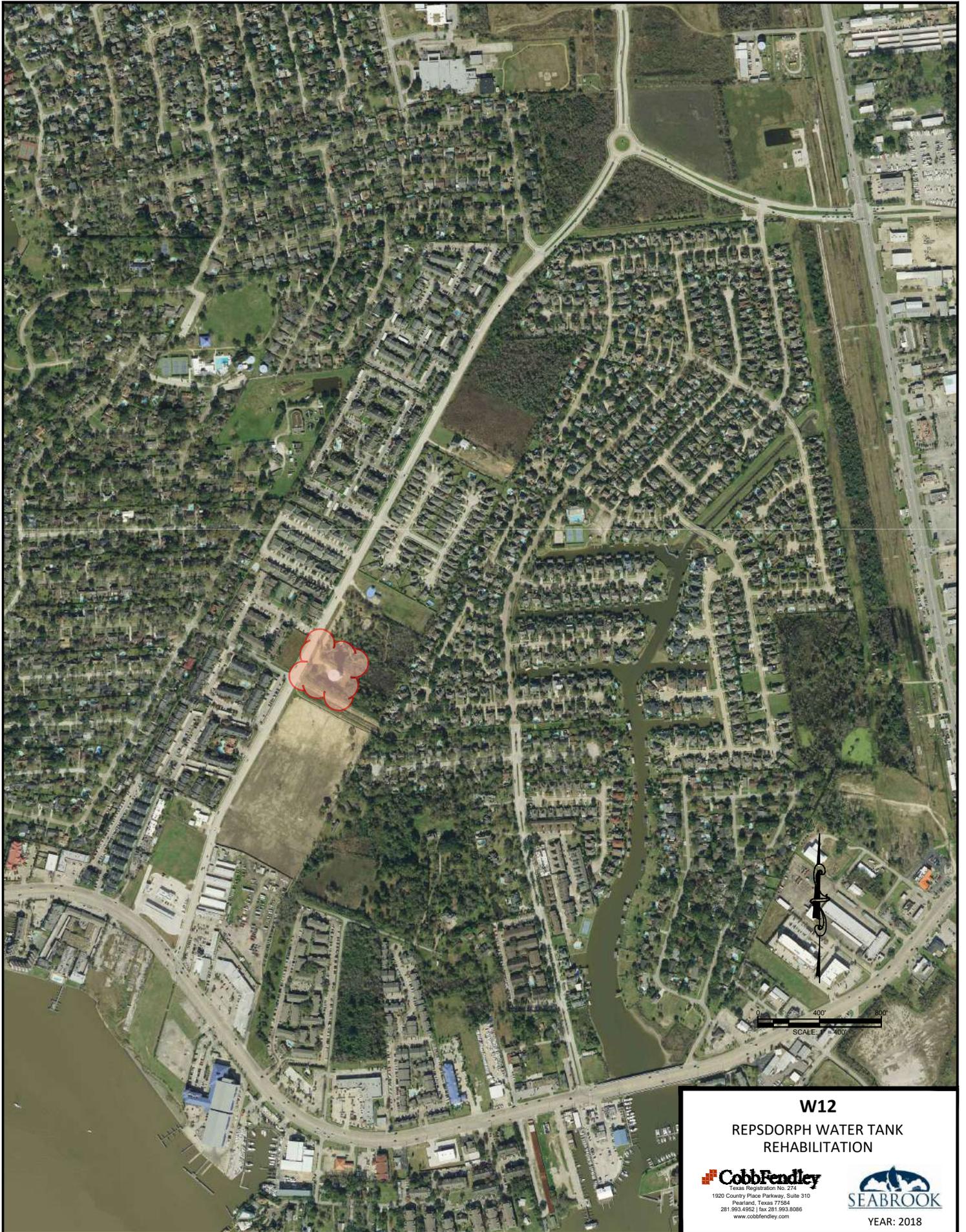
Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning				\$ 65,000			\$ 65,000
Land/Easements Acq.							\$ -
Construction				\$ 715,313	\$ -		\$ 715,313
Total Cost	\$ -	\$ -	\$ -	\$ 780,313	\$ -	\$ -	\$ 780,313

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash				\$ 780,313			\$ 780,313
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ 780,313	\$ -	\$ -	\$ 780,313

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
Interior Steel	20000	SF	\$ 10.00	\$ 200,000.00
Dehumidification and Disposal	1	LS	\$ 60,000.00	\$ 60,000.00
Exterior Steel	15000	SF	\$ 10.00	\$ 150,000.00
Shroud and Disposal	1	LS	\$ 110,000.00	\$ 110,000.00
Structural Allowance	1	LS	\$ 25,000.00	\$ 25,000.00
Project Contingencies (25%)				\$ 136,250.00
Construction Total				\$ 681,250.00

Comments/Special Project Notes:

Above estimate provided based on current DEI inspection reports.



W12
REPSDORF WATER TANK
REHABILITATION

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: CHLORAMINE CONVERSION
Project Location/Limits: CITY OWNED WATER PLANTS
CIP Number: W13
Facility Type: DISINFECTION EQUIPMENT

Project Description and Justification

The City purchases chloraminated surface water from the City of Pasadena. The City's water wells are disinfected with chlorine only. The City wants to use the same disinfection method on the surface water and well water to reduce taste and odor issues and production of disinfection by-products. Conversion to chloramine disinfection requires an ammonia chemical system to be installed at each of the three water plant sites. Liquid ammonia solution (LAS) is the preferred product. The ammonia and chlorine together creates chloramines.

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning		\$ 41,625					\$ 41,625
Land/Easements Acq.							\$ -
Construction		\$ 231,250					\$ 231,250
Total Cost \$		- \$ 272,875	\$ -	\$ -	\$ -	\$ -	- \$ 272,875

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash		\$ 272,875					\$ 272,875
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)							\$ -
Total Funding \$		- \$ 272,875	\$ -	\$ -	\$ -	\$ -	- \$ 272,875

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
Mobilization	1	LS	\$ 10,000.00	\$ 10,000.00
Water Plant 1 LAS disinfection in a fiberglass enclosure with concrete slab, including electrical and piping	1	LS	\$ 65,000.00	\$ 65,000.00
Water Plant 2 LAS disinfection in existing MCC room, including electrical and piping	1	LS	\$ 45,000.00	\$ 45,000.00
Water Plant 3 LAS disinfection in a fiberglass enclosure with concrete slab, including electrical and piping	1	LS	\$ 65,000.00	\$ 65,000.00
Project Contingencies (25%)				\$ 46,250.00
Construction Total				\$ 231,250.00

Comments/Special Project Notes:

TCEQ indicated that a city-wide chloramine conversion is preferable to converting one plant at a time. Liquid ammonia solution is stored in drums and day

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: NASA RD 1 WATER LINE IMPROVEMENTS
Project Location/Limits: NASA RD 1 FROM SH146 TO 7TH ST AND 3RD ST FROM NASA RD 1 to NICHOLSON ST
CIP Number: W14
Facility Type: WATER

Project Description and Justification

The water line along NASA Rd 1 from SH146 to 7 Street needs to be upsized to a 12-Inch line to match the lines on each side of SH146. A water line crossing NASA Rd 1 running along 3rd Street needs to be upsized to a 12-inch to allow for future development north of Nicholson St.

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning	\$ -	\$ 107,056					\$ 107,056
Land/Easements Acq.							\$ -
Construction			\$ 535,280				\$ 535,280
Total Cost	\$ -	\$ 107,056	\$ 535,280	\$ -	\$ -	\$ -	\$ 642,336

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds			\$ 535,280				\$ 535,280
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees		\$ 107,056					\$ 107,056
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ 107,056	\$ 535,280	\$ -	\$ -	\$ -	\$ 642,336

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
Along NASA Rd 1				
12-Inch PVC Water Line	635	LF	\$ 90.00	\$ 57,150.00
12-Inch PVC Water Line (Trenchless)	595	LF	\$ 120.00	\$ 71,400.00
12-Inch Gate Valves	3	EA	\$ 2,000.00	\$ 6,000.00
Fire Hydrant Assemblies	3	EA	\$ 4,500.00	\$ 13,500.00
Water Services	4	EA	\$ 2,000.00	\$ 8,000.00
Connect to Existing 6" WL	2	EA	\$ 1,500.00	\$ 3,000.00
Wet Connection to Existing 12" WL	1	EA	\$ 3,500.00	\$ 3,500.00
Along 3rd Street				
12-Inch PVC Water Line	100	LF	\$ 90.00	\$ 9,000.00
12-Inch PVC Water Line (Trenchless)	460	LF	\$ 120.00	\$ 55,200.00
12-Inch Water inside 24" Casing	130	LF	\$ 675.00	\$ 87,750.00
6-Inch Gate Valves	4	EA	\$ 1,100.00	\$ 4,400.00
Fire Hydrant Assemblies	2	EA	\$ 4,500.00	\$ 9,000.00
Water Services	4	EA	\$ 1,200.00	\$ 4,800.00
Cap and Plug Existing 6" Waterline	2	LS	\$ 2,500.00	\$ 5,000.00
Project Contingencies (20%)				\$ 197,580.00
Construction Total				\$ 535,280.00

Comments/Special Project Notes:

Project should be started once SH146 utility adjustments are under construction or completed. Project construction does not include crossing under SH 146, see CIP W7.



W14

**NASA RD 1 WATER LINE
IMPROVEMENTS**

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: OLD SH 146 INTERCONNECT
Project Location/Limits: PORT ROAD TO SEABROOK CITY LIMITS
CIP Number: W16
Facility Type: WATER

Project Description and Justification

The purpose of this project is to provide an interconnect between the City of Pasadena and the City of Seabrook. This is one of several locations of possible interconnects that will be used for emergency purposes.

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning		\$ 124,588					\$ 124,588
Land/Easements Acq.							\$ -
Construction			\$ 622,938				\$ 622,938
Total Cost	\$ -	\$ 124,588	\$ 622,938	\$ -	\$ -	\$ -	\$ 747,525

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees	\$ 124,588	\$ 622,938					\$ 747,525
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: __Other agency							\$ -
Total Funding	\$ -	\$ 124,588	\$ 622,938	\$ -	\$ -	\$ -	\$ 747,525

Opinion of Probable Construction Cost Estimate					
Description	Quantity	Unit	Unit Price	Total Cost	
12-Inch PVC Water Line	2870	LF	\$ 90.00	\$ 258,300.00	
12-Inch PVC Water Line (Trenchless)	280	LF	\$ 120.00	\$ 33,600.00	
12-Inch Gate Valves	7	EA	\$ 2,000.00	\$ 14,000.00	
12-Inch Vault/Meter/Check Valve	1	EA	\$ 75,000.00	\$ 75,000.00	
Fire Hydrant Assemblies	7	EA	\$ 4,500.00	\$ 31,500.00	
Water Services	6	EA	\$ 1,200.00	\$ 7,200.00	
Dewatering	3150	LF	\$ 25.00	\$ 78,750.00	
Project Contingencies (20%)				\$ 124,587.50	
Construction Total				\$ 622,937.50	

Comments/Special Project Notes:

Alternate water source. 12" interconnect, gives us more balanced water pressure.



W16
OLD SH 146 INTERCONNECT

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SEABROOK
YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: PINE GULLY AND HESTER'S GULLY WATER LINE IMPROVEMENTS
Project Location/Limits: TODVILLE ROAD BRIDGE CROSSINGS AT PINE GULLY AND HESTER'S GULLY
CIP Number: W17
Facility Type: WATER

Project Description and Justification

The purpose of this project is to provide increased water capacity to the water lines crossing Pine Gully and Hester's Gully.

COST BY FISCAL YEAR							
Project Cost	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
Engineering/Planning		\$ 52,360					\$ 52,360
Land/Easements Acq.							\$ -
Construction			\$ 153,000				\$ 153,000
Total Cost	\$ -	\$ 52,360	\$ 153,000	\$ -	\$ -	\$ -	\$ 205,360
FUNDING SOURCES BY FISCAL YEAR							
Funding Source	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
General Fund - Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: HARRIS COUNTY PG PORTION		\$ 52,360	\$ 153,000				\$ 205,360
Total Funding	\$ -	\$ 52,360	\$ 153,000	\$ -	\$ -	\$ -	\$ 205,360

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
Pine Gully				
12-Inch Equiv HDPE Direct Drill (Ult.)	400	LF	\$ 270.00	\$ 108,000.00
12-Inch Gate Valve and Box	1	EA	\$ 3,500.00	\$ 3,500.00
Air Release Valve	2	EA	\$ 5,000.00	\$ 10,000.00
Wet Connection	2	EA	\$ 3,000.00	\$ 6,000.00
Project Contingencies (20%)				\$ 25,500.00
Pine Gully Subtotal				\$ 153,000.00
Hester's Gully				
Mobilization	1	LS	\$ 2,800.00	\$ 2,800.00
Remove & Dispose of Existing Pipe	1	LS	\$ 800.00	\$ 800.00
8-Inch HDPE (Directional Drill)	100	LF	\$ 120.00	\$ 12,000.00
Fire Hydrant Assembly	2	EA	\$ 4,000.00	\$ 8,000.00
8-Inch Wet Connection	2	EA	\$ 2,000.00	\$ 4,000.00
Trench Safety System	80	LF	\$ 5.00	\$ 400.00
Erosion/Sediment Control	1	LS	\$ 2,000.00	\$ 2,000.00
SWPPP Inspection & Maintenance	1	LS	\$ 3,000.00	\$ 3,000.00
Reinforced Filter Fabric Fence	80	LF	\$ 2.00	\$ 160.00
Inlet Protection Barrier	2	EA	\$ 40.00	\$ 80.00
Sodding for Erosion Control	10	SY	\$ 25.00	\$ 250.00
Traffic Control	1	LS	\$ 5,000.00	\$ 5,000.00
Project Contingencies (20%)				\$ 7,698.00
Hester's Gully Subtotal				\$ 46,188.00
Construction Total				\$ 199,188.00

Comments/Special Project Notes:

Pine Gully Improvements are also included in D1 as the existing water line is tied to the bridge over Pine Gully. The crossings at both Pine Gully and Hester's Gully will require GLO easements.



0 400' 800'
SCALE: 1" = 400'

W17
PINE GULLY WATER LINE
IMPROVEMENTS

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: HESTER'S GULLY WATER LINE IMPROVEMENTS
Project Location/Limits: TODVILLE ROAD BRIDGE CROSSINGS AT PINE GULLY AND HESTER'S GULLY
CIP Number: W18
Facility Type: WATER

Project Description and Justification

The purpose of this project is to provide increased water capacity to the water lines crossing Pine Gully and Hester's Gully.

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning		\$ 15,640					\$ 15,640
Land/Easements Acq.							\$ -
Construction			\$ 46,188				\$ 46,188
Total Cost	\$ -	\$ 15,640	\$ 46,188	\$ -	\$ -	\$ -	\$ 61,828

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash		\$ 15,640	\$ 46,188				\$ 61,828
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ HARRIS COUNTY PG PORTION							\$ -
Total Funding	\$ -	\$ 15,640	\$ 46,188	\$ -	\$ -	\$ -	\$ 61,828

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
Pine Gully				
12-Inch Equiv HDPE Direct Drill (Ult.)	400	LF	\$ 270.00	\$ 108,000.00
12-Inch Gate Valve and Box	1	EA	\$ 3,500.00	\$ 3,500.00
Air Release Valve	2	EA	\$ 5,000.00	\$ 10,000.00
Wet Connection	2	EA	\$ 3,000.00	\$ 6,000.00
Project Contingencies (20%)				\$ 25,500.00
Pine Gully Subtotal				\$ 153,000.00
Hester's Gully				
Mobilization	1	LS	\$ 2,800.00	\$ 2,800.00
Remove & Dispose of Existing Pipe	1	LS	\$ 800.00	\$ 800.00
8-Inch HDPE (Directional Drill)	100	LF	\$ 120.00	\$ 12,000.00
Fire Hydrant Assembly	2	EA	\$ 4,000.00	\$ 8,000.00
8-Inch Wet Connection	2	EA	\$ 2,000.00	\$ 4,000.00
Trench Safety System	80	LF	\$ 5.00	\$ 400.00
Erosion/Sediment Control	1	LS	\$ 2,000.00	\$ 2,000.00
SWPPP Inspection & Maintenance	1	LS	\$ 3,000.00	\$ 3,000.00
Reinforced Filter Fabric Fence	80	LF	\$ 2.00	\$ 160.00
Inlet Protection Barrier	2	EA	\$ 40.00	\$ 80.00
Sodding for Erosion Control	10	SY	\$ 25.00	\$ 250.00
Traffic Control	1	LS	\$ 5,000.00	\$ 5,000.00
Project Contingencies (20%)				\$ 7,698.00

Hester's Gully Subtotal	\$ 46,188.00
Construction Total	\$ 199,188.00

Comments/Special Project Notes:

Pine Gully Improvements are also included in D1 as the existing water line is tied to the bridge over Pine Gully. The crossings at both Pine Gully and Hester's Gully will require GLO easements.



0 200' 400'
SCALE: 1"=200'

W18
HESTER'S GULLY WATER LINE
IMPROVEMENTS

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YEAR: 2018

PROPOSED WASTEWATER PROJECTS
FY19 – FY23+

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: SHIPYARDS SEWER SERVICE PHASE 1
Project Location/Limits: WEST SIDE OF JENNINGS CHANNEL TO NORTH SIDE OF SECOND CUT BRIDGE
CIP Number: WW2
Facility Type: WASTEWATER

Project Description and Justification

This project would provide the means to provide sewer service to the Shipyards area.

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 211,388	\$ 211,388
Land/Easements Acq.						\$ 75,000	\$ 75,000
Construction						\$ 1,174,375	\$ 1,174,375
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,460,763	\$ 1,460,763

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution						\$ 1,460,763	\$ 1,460,763
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,460,763	\$ 1,460,763

Opinion of Probable Construction Cost Estimate					
Description	Quantity	Unit	Unit Price	Total Cost	
6-Inch Force Main	1900	LF	\$ 60.00	\$ 114,000.00	
6-Inch Force Main w/12-Inch Casing	400	LF	\$ 225.00	\$ 90,000.00	
6-Inch FM Directional Drilled	400	LF	\$ 225.00	\$ 90,000.00	
8-Inch Sanitary Sewer Pipe	800	LF	\$ 75.00	\$ 60,000.00	
Dewatering	2700	LF	\$ 25.00	\$ 67,500.00	
Manholes	2	EA	\$ 4,000.00	\$ 8,000.00	
New Lift Station	1	LS	\$ 500,000.00	\$ 500,000.00	
Dewatering	400	LF	\$ 25.00	\$ 10,000.00	
Project Contingencies (25%)				\$ 234,875.00	
Construction Total				\$ 1,174,375.00	

Comments/Special Project Notes:



WW2

SHIPYARDS SEWER SERVICE PHASE I

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: SHIPYARDS SEWER SERVICE PHASE 2

Project Location/Limits: WEST SIDE OF JENNINGS BRIDGE TO WEST AND SOUTHERN EXTENTS OF THE ISLAND

CIP Number: WW3

Facility Type: WASTEWATER

Project Description and Justification

This would provide adequate public sewer service to the Shipyards area.

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22+	FY23+	
Engineering/Planning						\$ 95,000	\$ 95,000
Land/Easements Acq.							\$ -
Construction						\$ 587,500	\$ 587,500
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 682,500	\$ 682,500

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution						\$ 682,500	\$ 682,500
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 682,500	\$ 682,500

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
8-Inch Sanitary Sewer Pipe	3900	LF	\$ 75.00	\$ 292,500.00
Manholes	20	EA	\$ 4,000.00	\$ 80,000.00
Dewatering	3900	LF	\$ 25.00	\$ 97,500.00
Project Contingencies (25%)				\$ 117,500.00
Construction Total				\$ 587,500.00

Comments/Special Project Notes:

Project is dependent on WW2 being completed or under construction.



WW3

SHIPYARDS WATER SERVICE PHASE II

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: TODVILLE SEWER LINE REPLACEMENT
Project Location/Limits: BRUMMERHOP STREET TO MEYER ROAD
CIP Number: WW4
Facility Type: WASTEWATER

Project Description and Justification

The project will replace the leaking sewer system from E Meyer Rd to Brummerhop St with a new HDPE pipe and reconnect all services with PVC pipe. Additionally all manholes will be replaced with precast manholes and corrosive resistant liner.

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning	\$ 369,700						\$ 369,700
Land/Easements Acq.							\$ -
Construction	\$ 989,900	\$ 247,475					\$ 1,237,375
Total Cost	\$ 1,359,600	\$ 247,475	\$ -	\$ -	\$ -	\$ -	\$ 1,607,075

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation	\$ 1,359,600	\$ 247,475					\$ 1,607,075
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)							\$ -
Total Funding	\$ 1,359,600	\$ 247,475	\$ -	\$ -	\$ -	\$ -	\$ 1,607,075

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
Mobilization	1	LS	\$ 50,000.00	\$ 50,000.00
12-Inch Sanitary Sewer Pipe	6400	LF	\$ 130.00	\$ 832,000.00
Services	75	EA	\$ 1,200.00	\$ 90,000.00
Remove Existing Manholes	19	EA	\$ 1,800.00	\$ 34,200.00
Remove Existing Sewer	6400	LF	\$ 15.00	\$ 96,000.00
Pavement Point Repair	450	SY	\$ 75.00	\$ 33,750.00
Manholes	20	EA	\$ 11,500.00	\$ 230,000.00
Dewatering	1280	LF	\$ 50.00	\$ 64,000.00
Bypass Pumping	240	DAYS	\$ 1,500.00	\$ 360,000.00
SWPPP	1	EA	\$ 5,000.00	\$ 5,000.00
Traffic Control	1	LS	\$ 30,000.00	\$ 30,000.00
Project Contingencies (15%)				\$ 273,742.50
Construction Total				\$ 2,098,692.50

Comments/Special Project Notes:

Project Under Construction; Estimated Completion Fall 2018



WW4
TODVILLE SEWER LINE
REPLACEMENT

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: WASTEWATER TREATMENT PLANT UPGRADES PHASE 2
Project Location/Limits: WWTP SITE
CIP Number: WW6
Facility Type: WASTEWATER

Project Description and Justification

This project includes the replacement of one existing clarifier and coating and replacing piping within the lift station. Replacement of the clarifier is needed since it is reaching the end of its service life. The piping and walls in the lift station are deteriorating.

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning	\$ 138,000						\$ 138,000
Land/Easements Acq.							\$ -
Construction	\$ 690,400	\$ 172,600					\$ 863,000
Total Cost	\$ 828,400	\$ 172,600	\$ -	\$ -	\$ -	\$ -	\$ 1,001,000

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation	\$ 828,400	\$ 172,600					\$ 1,001,000
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ 828,400	\$ 172,600	\$ -	\$ -	\$ -	\$ -	\$ 1,001,000

Description	Opinion of Probable Construction Cost Estimate			Total Cost
	Quantity	Unit	Unit Price	
Clarifier Mechanism				
Clarifier Demo	1	EA	\$ 35,000.00	\$ 35,000.00
Clarifier Mechanism	1	EA	\$ 195,000.00	\$ 195,000.00
Launder/Weir Replacement	1	EA	\$ 135,000.00	\$ 135,000.00
Weir Cleaning Equipment	1	EA	\$ 75,000.00	\$ 75,000.00
RAS Equipment	1	LS	\$ 40,000.00	\$ 40,000.00
Electrical	1	LS	\$ 22,500.00	\$ 22,500.00
Lift Station				
Upgrades to Lift Station	1	LS	\$ 275,000.00	\$ 275,000.00
Project Contingencies (20%)				\$ 155,500.00
Construction Total				\$ 933,000.00

Comments/Special Project Notes:

Project Under Construction; Estimated Completion Fall 2018



WW6
WASTEWATER TREATMENT
PLANT UPGRADES PHASE II

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: RED BLUFF ROAD SANITARY SEWER EXTENSION
Project Location/Limits: BAYVIEW DRIVE TO PARK DRIVE
CIP Number: WW7
Facility Type: WASTEWATER

Project Description and Justification

This project would extend the gravity sanitary sewer line at Bayview Drive along Red Bluff to Park Drive to provide for future expansion in the area.

Project Cost Estimates:

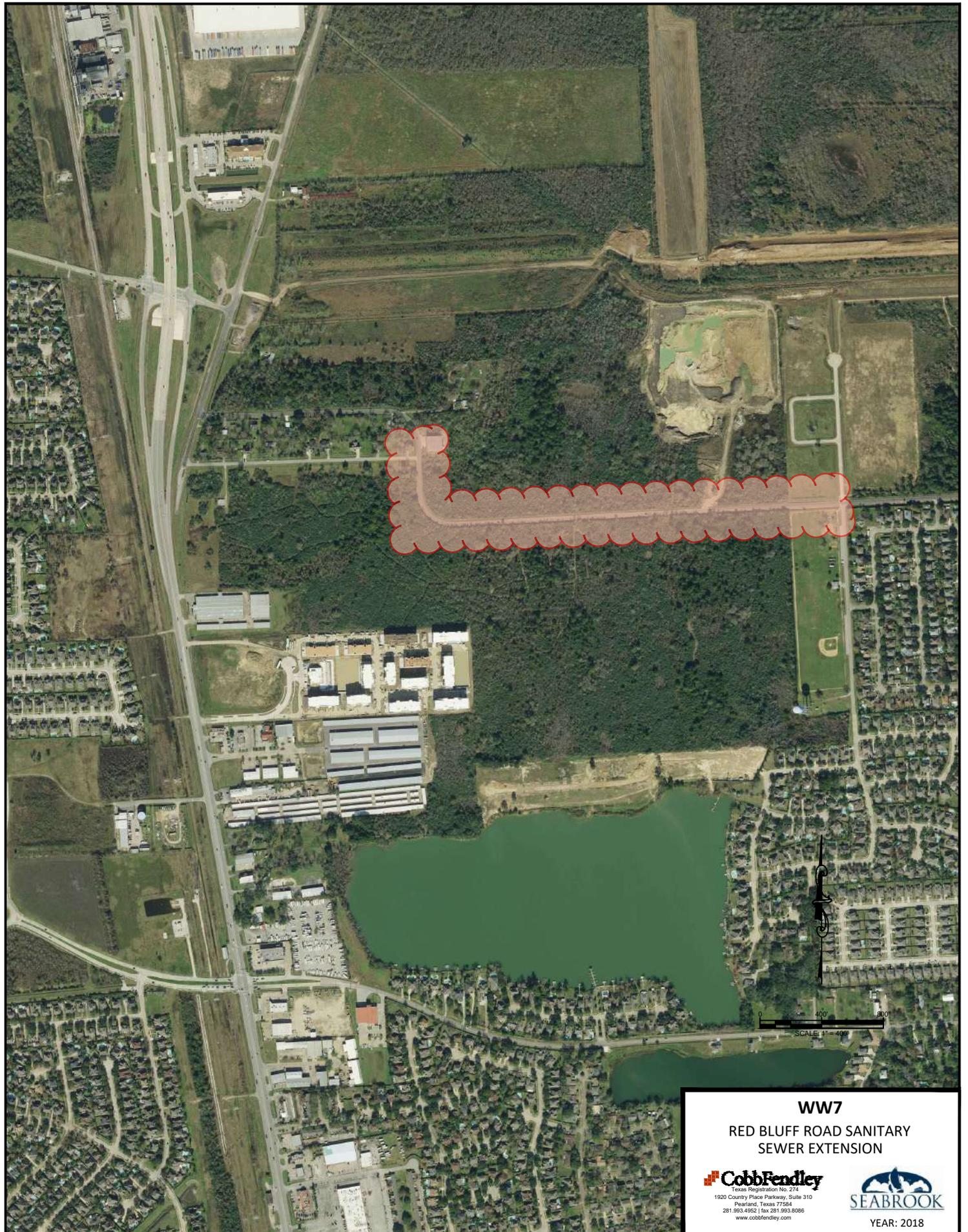
Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22+	FY23+	
Engineering/Planning			\$ 106,800				\$ 106,800
Land/Easements Acq.							\$ -
Construction				\$ 534,000			\$ 534,000
Total Cost	\$ -	\$ -	\$ 106,800	\$ 534,000	\$ -	\$ -	\$ 640,800

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees		\$ -	\$ 106,800	\$ 534,000			\$ 640,800
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ 106,800	\$ 534,000	\$ -	\$ -	\$ 640,800

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
12-Inch Sanitary Sewer (Gravity)	3200	LF	\$ 120.00	\$ 384,000.00
Manholes	10	EA	\$ 5,000.00	\$ 50,000.00
Dewatering	3200	LF	\$ 25.00	\$ 80,000.00
Project Contingencies (25%)				\$ 20,000.00
Construction Total				\$ 534,000.00

Comments/Special Project Notes:

Development driven.



0 400 800
SCALE 1" = 400'

WW7
RED BLUFF ROAD SANITARY
SEWER EXTENSION

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: STATE HIGHWAY 146 SANITARY SEWER IMPROVEMENTS

Project Location/Limits:

CIP Number: WW8

Facility Type: WASTEWATER

Project Description and Justification

The purpose of this project is to relocate the existing wastewater line facilities with the existing TxDOT SH146 ROW to a location outside of the new proposed highway improvements.

Project Cost	COST BY FISCAL YEAR						TOTAL
	Prior Funding	FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning	\$ 156,563	\$ 137,665					\$ 294,228
Land/Easements Acq.							\$ -
Construction	\$ -	\$ 1,960,003					\$ 1,960,003
Total Cost	\$ 156,563	\$ 2,097,668	\$ -	\$ -	\$ -	\$ -	\$ 2,254,231

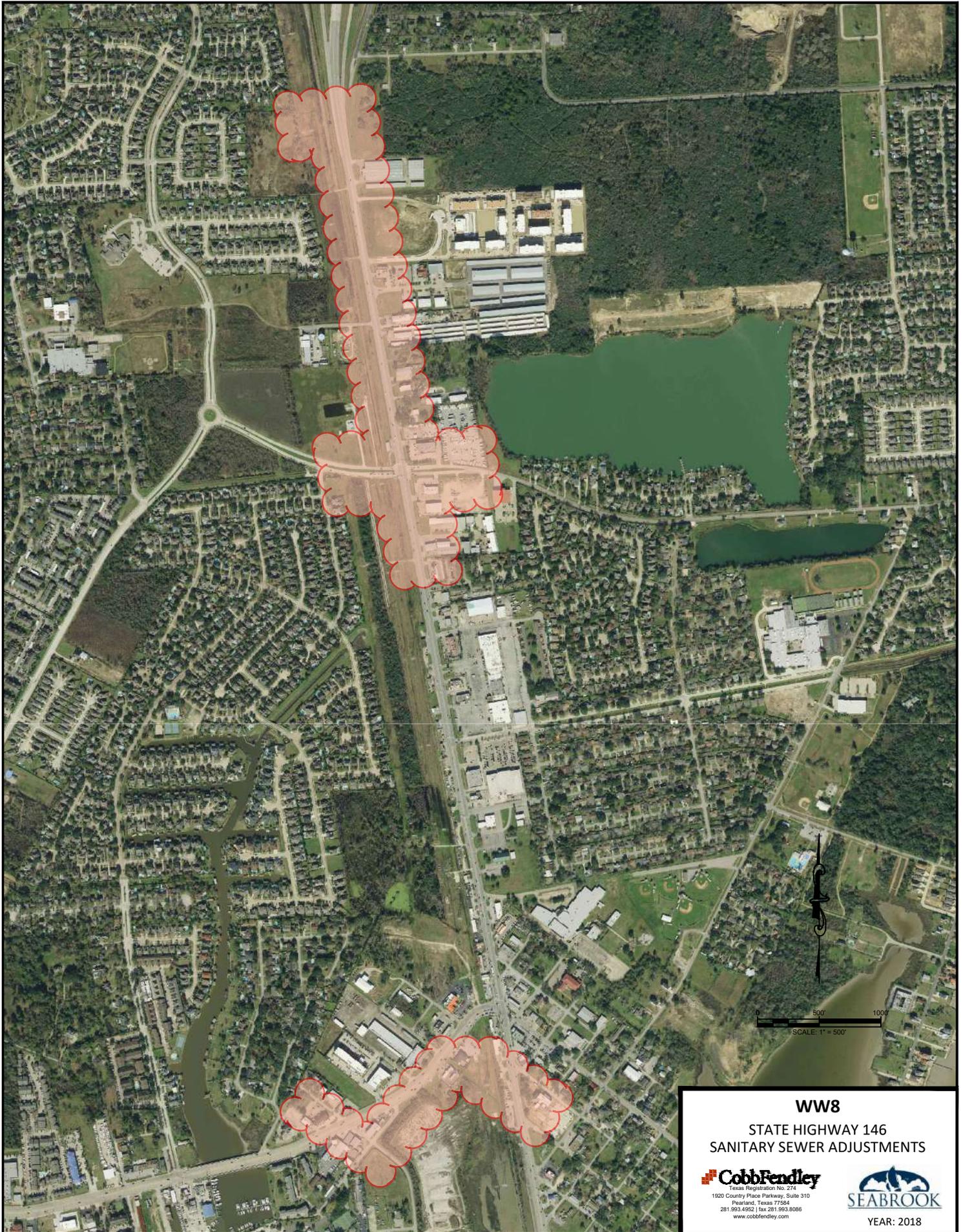
Funding Source	FUNDING SOURCES BY FISCAL YEAR						TOTAL
	Prior Funding	FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash	\$ 156,563	\$ 137,665					\$ 294,228
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ SIB	\$ -	\$ 1,960,003	\$ -	\$ -			\$ 1,960,003
Total Funding	\$ 156,563	\$ 2,097,668	\$ -	\$ -	\$ -	\$ -	\$ 2,254,231

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
Concrete	10	CY	\$ 87.00	\$ 870.00
12-Inch Sanitary Sewer	3558	LF	\$ 235.00	\$ 836,130.00
18-Inch Sanitary Sewer	233	LF	\$ 322.00	\$ 75,026.00
Sanitary Manhole	8	EA	\$ 5,425.00	\$ 43,400.00
Sanitary Manhole w/ Drop	3	EA	\$ 6,150.00	\$ 18,450.00
Tie Existing Sanitary Sewer to Prop Manhole	4	EA	\$ 3,700.00	\$ 14,800.00
Connection to Existing Manhole	2	EA	\$ 2,400.00	\$ 4,800.00
Abandon 10-Inch Sanitary Sewer	2	EA	\$ 30,000.00	\$ 60,000.00
Abandon 12-Inch Sanitary Sewer	2	EA	\$ 40,000.00	\$ 80,000.00
6-Inch Force Main	225	LF	\$ 87.00	\$ 19,575.00
10-Inch Force Main	3957	LF	\$ 96.00	\$ 379,872.00
16-Inch Force Main	321	LF	\$ 121.00	\$ 38,841.00
22-Inch Steel (Auger)	572	LF	\$ 725.00	\$ 414,700.00
28-Inch Steel (Auger)	186	LF	\$ 900.00	\$ 167,400.00
Air Release Valve & Manhole	2	EA	\$ 8,075.00	\$ 16,150.00
Force Main Connection	5	EA	\$ 3,200.00	\$ 16,000.00
Abandon Sanitary Sewer	1	LS	\$ 1,515.00	\$ 1,515.00

Bypass Pumping	1	LS	\$ 199,500.00	\$ 199,500.00
Construction Total				\$ 2,387,029.00

Comments/Special Project Notes:

These utility improvements will be submitted along with the TxDOT plans for their contractor to install, instead of the City bidding it out as a separate project. The benefit of this approach is that it will eliminate the unknown timing of each property acquisition where the new utilities will be laid.



WW8
STATE HIGHWAY 146
SANITARY SEWER ADJUSTMENTS

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SEABROOK
YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: PINE GULLY WASTEWATER TREATMENT PLANT PHASE 1A
Project Location/Limits: NORTH OF THE PUBLIC WORKS FACILITY
CIP Number: WW9
Facility Type: WASTEWATER

Project Description and Justification

This project is the first phase (Phase 1A) of relocating the City's Waste Water Treatment Plant (WWTP) from Main Street to a site located adjacent to the new Public Works Facility. The City's existing WWTP suffered significant damage during Hurricane Ike due to its location to Galveston Bay.

COST BY FISCAL YEAR							
Project Cost	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
Engineering/Planning	\$ 511,936	\$ 152,430	\$ 39,334				\$ 703,700
Land/Easements Acq.							\$ -
Construction		\$ 2,595,768	\$ 1,112,472				\$ 3,708,240
Total Cost	\$ 511,936	\$ 2,748,198	\$ 1,151,806	\$ -	\$ -	\$ -	\$ 4,411,940
FUNDING SOURCES BY FISCAL YEAR							
Funding Source	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation	\$ 511,936	\$ 2,435,670	\$ 39,334				\$ 2,986,940
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees		\$ 312,528	\$ 1,112,472				\$ 1,425,000
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ 511,936	\$ 2,748,198	\$ 1,151,806	\$ -	\$ -	\$ -	\$ 4,411,940

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
PACKAGE				
0.25 MGD Package Plant	1	LS	\$ 1,250,000.00	\$ 1,250,000.00
and Mechanical/Electrical	1	LS	\$ 150,000.00	\$ 150,000.00
Electrical Interconnection	1	LS	\$ 162,700.00	\$ 162,700.00
Utility Piping	1	LS	\$ 150,000.00	\$ 150,000.00
Access Sidewalks	500	SYD	\$ 175.00	\$ 87,500.00
(Crushed Concrete)	350	SYD	\$ 30.00	\$ 10,500.00
Concrete Access Apron	100	SYD	\$ 125.00	\$ 12,500.00
WWTP	6200	LF	\$ 100.00	\$ 620,000.00
(Excluding FM)	100	LF	\$ 300.00	\$ 30,000.00
Upgrade Pumps	1	LS	\$ 150,000.00	\$ 150,000.00
Fm (at WWTP)	1	EA	\$ 40,000.00	\$ 40,000.00
12 inch FM on 146	1	LS	\$ 75,000.00	\$ 75,000.00
Valves	3	EA	\$ 15,000.00	\$ 45,000.00
FM	1	LS	\$ 12,000.00	\$ 12,000.00
(400 AMPS)	1	LS	\$ 45,000.00	\$ 45,000.00
MGD and Interconnection	1	LS	\$ 250,000.00	\$ 250,000.00
Project Contingencies (20%)				\$ 618,040.00
Construction Total				\$ 3,708,240.00

Comments/Special Project Notes:

This project is one five phases (1A, 1B, 2, 3, 4). This phase will provide 0.25 MGD of capacity to the plant. Project Design approved Spring 2017. East Meyer Pipe Bursting (WW1) was not needed.



WW9
PINE GULLY WASTEWATER
TREATMENT PLANT PHASE 1A

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SEABROOK
YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: PINE GULLY WASTEWATER TREATMENT PLANT PHASE 1B
Project Location/Limits: NORTH OF THE PUBLIC WORKS FACILITY
CIP Number: WW10
Facility Type: WASTEWATER

Project Description and Justification

This project is Phase 1B of relocating the City's Waste Water Treatment Plant (WWTP) from Main Street to a site located adjacent to the new Public Works Facility. Sewage from areas served by lift station 11 and LS 14 will be conveyed to the proposed WWTP. Force mains from LS 11 and 14 will tie into the existing 12 inch force main on SH 146. The remaining force main to the manhole on East Meyer Avenue will be plugged and abandoned. WWTP will have capacity to treat 0.50 MGD.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 640,000	\$ 640,000
Land/Easements Acq.							\$ -
Construction						\$ 3,591,250	\$ 3,591,250
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,231,250	\$ 4,231,250

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant						\$ 4,231,250	\$ 4,231,250
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,231,250	\$ 4,231,250

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
Add 0.25 MGD Plant Capacity	1	LS	\$ 2,300,000.00	\$ 2,300,000.00
SH146	1	LS	\$ 75,000.00	\$ 75,000.00
Plug 12-Inch FM to MH	1	LS	\$ 2,500.00	\$ 2,500.00
6-Inch FM to 12-Inch FM	100	LF	\$ 100.00	\$ 10,000.00
Upgrade Pumps at LS11	1	LS	\$ 150,000.00	\$ 150,000.00
LS14 Tie Into 12-Inch FM	1	LS	\$ 75,000.00	\$ 75,000.00
Upgrade Pumps at LS14	1	LS	\$ 150,000.00	\$ 150,000.00
Project Contingencies (30%)				\$ 828,750.00
Construction Total				\$ 3,591,250.00

Comments/Special Project Notes:

This project is one five phases (1A, 1B, 2, 3, 4). This phase will provide an additional 0.25 MGD of capacity to the plant and bring the total to 0.50 MGD.



WW10

**PINE GULLY WASTEWATER
TREATMENT PLANT PHASE 1B**

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: PINE GULLY WASTEWATER TREATMENT PLANT PHASE 2
Project Location/Limits: NORTH OF THE PUBLIC WORKS FACILITY
CIP Number: WW11
Facility Type: WASTEWATER

Project Description and Justification

This project is Phase 2 in relocating the City's Waste Water Treatment Plant (WWTP) from Main Street to a site located adjacent to the new Public Works Facility. Sewage from areas served by lift station 4 will be conveyed to the proposed WWTP. Proposed 8 inch force main will convey flow from LS 4 to WWTP. A lift station at the WWTP is proposed for this phase. WWTP will have capacity to treat 1.25 MGD.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 3,982,640	\$ 3,982,640
Land/Easements Acq.							\$ -
Construction						\$ 19,913,200	\$ 19,913,200
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 23,895,840	\$ 23,895,840

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant						\$ 23,895,840	\$ 23,895,840
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 23,895,840	\$ 23,895,840

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Add 1.25 MGD Plant Capacity	1	LS	\$ 12,500,000.00	\$ 12,500,000.00
Wet Well	1	EA	\$ 625,000.00	\$ 625,000.00
Piping & Fittings	1	LS	\$ 250,000.00	\$ 250,000.00
Pumps	1	LS	\$ 150,000.00	\$ 150,000.00
Control Panel	1	EA	\$ 95,000.00	\$ 95,000.00
Station	1	LS	\$ 40,000.00	\$ 40,000.00
120 kW Generator	1	EA	\$ 250,000.00	\$ 250,000.00
Transfer Switch	1	EA	\$ 44,000.00	\$ 44,000.00
Generator Foundation	1	EA	\$ 35,000.00	\$ 35,000.00
Electrical	1	LS	\$ 40,000.00	\$ 40,000.00
LS4 Improvements	1	LS	\$ 550,000.00	\$ 550,000.00
8-Inch FM from LS4 to WWTP	5400	LF	\$ 104.00	\$ 561,600.00
Boring/Casing	60	LF	\$ 390.00	\$ 23,400.00
Plants	1	LS	\$ 200,000.00	\$ 200,000.00
Project Contingencies (30%)				\$ 4,549,200.00
Construction Total				\$ 19,913,200.00

Comments/Special Project Notes:

This project is one five phases (1A, 1B, 2, 3, 4). This phase will provide an additional 0.75 MGD of capacity to the plant and bring the total to 1.25 MGD.



WW11
PINE GULLY WASTEWATER
TREATMENT PLANT PHASE 2

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: PINE GULLY WASTEWATER TREATMENT PLANT PHASE 3
Project Location/Limits: NORTH OF THE PUBLIC WORKS FACILITY
CIP Number: WW12
Facility Type: WASTEWATER

Project Description and Justification

This project is Phase 3 of relocating the City's Waste Water Treatment Plant (WWTP) from Main Street to a site located adjacent to the new Public Works Facility. Sewage from areas served by areas that ultimately gravity flow to the existing WWTP will be conveyed to the proposed WWTP. Force mains from the WWTP lift station will require a new force main or combination of force main and gravity sewer to convey the sewage to the new WWTP. For preliminary cost estimating a 12 inch force main was used. WWTP will have capacity to treat 2.50 MGD.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22+	FY23+	
Engineering/Planning						\$ 4,149,600	\$ 4,149,600
Land/Easements Acq.							\$ -
Construction						\$ 20,748,000	\$ 20,748,000
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,897,600	\$ 24,897,600

FUNDING SOURCES BY FISCAL YEAR

Funding Source	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant						\$ 24,897,600	\$ 24,897,600
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,897,600	\$ 24,897,600

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Add 1.25 MGD Plant Capacity	1	LS	\$ 12,500,000.00	\$ 12,500,000.00
WWTP	14500	LF	\$ 200.00	\$ 2,900,000.00
Boring/Casing	200	LF	\$ 300.00	\$ 60,000.00
Improvements	1	LS	\$ 500,000.00	\$ 500,000.00
Project Contingencies (30%)				\$ 4,788,000.00
Construction Total				\$ 20,748,000.00

Comments/Special Project Notes:

This project is one five phases (1A, 1B, 2, 3, 4). This phase will provide an additional 1.25 MGD of capacity to the plant and bring the total to 2.5 MGD.



WW12
PINE GULLY WASTEWATER
TREATMENT PLANT PHASE 3

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: PINE GULLY WASTEWATER TREATMENT PLANT PHASE 4

Project Location/Limits: WWTP FACILITY ON MAIN STREET

CIP Number: WW13

Facility Type: WASTEWATER

Project Description and Justification

This project is Phase 4 in relocating the City's Waste Water Treatment Plant (WWTP) from Main Street to a site located adjacent to the new Public Works Facility. This project is to demolish and decommission the facilities at the Main Street WWTP, except for the lift station.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 111,150	\$ 111,150
Land/Easements Acq.							\$ -
Construction						\$ 617,500	\$ 617,500
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 728,650	\$ 728,650

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant						\$ 728,650	\$ 728,650
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 728,650	\$ 728,650

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Decommissioning	1	LS	\$ 200,000.00	\$ 200,000.00
Demolition	1	LS	\$ 275,000.00	\$ 275,000.00
Project Contingencies (30%)				\$ 142,500.00
Construction Total				\$ 617,500.00

Comments/Special Project Notes:

This project is one five phases (1A, 1B, 2, 3, 4).



WW13
PINE GULLY WASTEWATER
TREATMENT PLANT PHASE 4

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: LIFT STATION NO. 5 FORCE MAIN IMPROVEMENTS

Project Location/Limits: ALONG TODVILLE FROM WATERFRONT LIFT STATION TO MAIN ST

CIP Number: WW14

Facility Type: WASTEWATER

Project Description and Justification

The purpose of this project is to increase capacity to the line to address the development at Waterfront and the shipyards.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning					\$ 100,230		\$ 100,230
Land/Easements Acq.							\$ -
Construction					\$ 501,150		\$ 501,150
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ 601,380	\$ -	\$ 601,380
FUNDING SOURCES BY FISCAL YEAR							
Funding Source	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution					\$ 601,380		\$ 601,380
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ 601,380	\$ -	\$ 601,380

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
8-Inch Force Main	2100	LF	\$ 80.00	\$ 168,000.00
8-Inch FM Directional Drilled	600	LF	\$ 250.00	\$ 150,000.00
Dewatering	2700	LF	\$ 25.00	\$ 67,500.00
Project Contingencies (30%)				\$ 115,650.00
Construction Total				\$ 501,150.00

Comments/Special Project Notes:

This project will require a USACE Permit and GLO Easement.



0 200' 400'
SCALE: 1"=200'

WW14
LIFT STATION NO. 5 FORCE
MAIN IMPROVEMENTS

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: CLARIFIER AT MAIN STREET WWTP
Project Location/Limits: MAIN STREET WWTP
CIP Number: WW15
Facility Type: WASTEWATER

Project Description and Justification

Replacement of Clarifier No. 1 -- it is reaching the end of its service life. Depends on PGWWTP progression.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 137,250	\$ 137,250
Land/Easements Acq.							\$ -
Construction						\$ 686,250	\$ 686,250
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 823,500	\$ 823,500

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)						\$ 823,500	\$ 823,500
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 823,500	\$ 823,500

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Components	1	LS	\$ 24,000.00	\$ 24,000.00
Clarifier Rehabilitation	1	LS	\$ 450,000.00	\$ 450,000.00
Scum System	1	LS	\$ 75,000.00	\$ 75,000.00
Project Contingencies (25%)				\$ 137,250.00
Construction Total				\$ 686,250.00

Comments/Special Project Notes:

This project is dependent upon the status of the Pine Gully WWTP. If all flows have not been redirected to the Pine Gully WWTP by the end of its service life, the clarifier will need to be replaced.



WW15
CLARIFIER NO. 1 REHABILITATION
AT MAIN STREET WWTP

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YEAR: 2018

PROPOSED DRAINAGE PROJECTS
FY19 – FY23+

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: TODVILLE ROAD BRIDGE
Project Location/Limits: INTERSECTION OF TODVILLE ROAD AND PINE GULLY
CIP Number: D1
Facility Type: DRAINAGE

Project Description and Justification

The purpose of this project is to replace the existing Todville Road Bridge with a longer elevated span to provide for additional stormwater runoff to pass through. When the City expanded the width of Pine Gully from Todville to the Fire Training Grounds to provide for 100-yr stormwater runoff in the area, the bridge has since been a bottle neck (restrictor) for stormwater reaching Galveston Bay.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning		\$ 627,318					\$ 627,318
Land/Easements Acq.							\$ -
Construction		\$ 3,485,100					\$ 3,485,100
Total Cost	\$ -	\$ 4,112,418	\$ -	\$ -	\$ -	\$ -	\$ 4,112,418

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ Harris County		\$ 4,112,418					\$ 4,112,418
Total Funding	\$ -	\$ 4,112,418	\$ -	\$ -	\$ -	\$ -	\$ 4,112,418

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Bridge & Paving				
Concrete Bridge (70' by 225') (Ult.)	15750	SF	\$ 105.00	\$ 1,653,750.00
Roadway Approaches (30' by 400')	12000	SF	\$ 30.00	\$ 360,000.00
Hike and Bike Trail	400	FT	\$ 25.00	\$ 10,000.00
Bridge & Paving Subtotal				\$ 2,023,750.00
Sanitary				
Relocate Lift Station No. 1	1	LS	\$ 550,000.00	\$ 550,000.00
Sanitary Gravity Line (10-Inch +)	200	LF	\$ 140.00	\$ 28,000.00
10-Inch HDPE Direct Drill San. FM	400	LF	\$ 250.00	\$ 100,000.00
Sanitary Force Main (8-Inch)	600	LF	\$ 85.00	\$ 51,000.00
Sanitary Manhole w/Vent	3	EA	\$ 7,000.00	\$ 21,000.00
Air Release Valve	2	EA	\$ 2,000.00	\$ 4,000.00
Dewatering	200	LF	\$ 25.00	\$ 5,000.00
Sanitary Subtotal				\$ 759,000.00
Water				
12-Inch Equiv HDPE Direct Drill (Ult.)	400	LF	\$ 270.00	\$ 108,000.00
12-Inch Gate Valve and Box	1	EA	\$ 3,500.00	\$ 3,500.00
Air Release Valve	2	EA	\$ 2,000.00	\$ 4,000.00
Wet Connection	2	EA	\$ 3,000.00	\$ 6,000.00
Water Subtotal				\$ 121,500.00
Total				\$ 2,904,250.00

Project Contingencies (20%)	\$ 580,850.00
Construction Total	\$ 3,485,100.00

Comments/Special Project Notes:

The crossing is based on the proposed ultimate intersection of Todville Road (Master Thoroughfare Plan) and the ultimate width of Pine Gully. As part of this project, Lift Station No. 1 (LS#1) will need to be relocated and the water and sewer line along the bridge will be lowered under the Gully. It is planned to relocate LS#1 on adjacent property owned by the City. Currently Todville Road is a Harris County Roadway and Pine Gully is a Harris County Flood Control Channel. Any improvements would be under each of thier jurisdictions, as well as the United States Army Corps of Engineers (USACE). A GLO Easement would also be required. Would anticipate a cost sharing of this project with Harris County and possibly the Port of Houston Authority (POHA).



D1
TODVILLE ROAD BRIDGE

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: EL MAR DITCH
Project Location/Limits: FROM BAHAMA DRIVE TO 1000-FT EAST OF N. MEYER
CIP Number: D2
Facility Type: DRAINAGE

Project Description and Justification

This ditch is in the center of El Mar Lane and is too shallow to provide proper drainage to the subdivision area or the commercial area along SH146 that is connected to it. The City has attempted to improve the drainage within the Miramar Subdivision several times, but the depth of this channel has precluded reaching a satisfactory outcome. The space with the street right of way would require the ditch to be enclosed to achieve the needed depth and capacity. The intent would be to provide a 100-year storm capacity for the SH146 & Miramar area.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 775,190	\$ 775,190
Land/Easements Acq.						\$ 200,000	\$ 200,000
Construction						\$ 3,875,950	\$ 3,875,950
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,851,140	\$ 4,851,140

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution						\$ 4,851,140	\$ 4,851,140
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,851,140	\$ 4,851,140

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Box Storm Sewer	2800	LF	\$ 725.00	\$ 2,030,000.00
Channel Excavation	27500	CY	\$ 20.00	\$ 550,000.00
Channel Excavation (Within Park)	800	LF	\$ 400.00	\$ 320,000.00
Backslope Swales and Interceptors	1100	LF	\$ 40.00	\$ 44,000.00
Trails	2500	LF	15	\$ 37,500.00
Project Contingencies (30%)				\$ 894,450.00
Construction Total				\$ 3,875,950.00

Comments/Special Project Notes:

Project will require environmental permit from the USACE for the work east of N. Meyer.



D2
EL MAR DITCH

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SEABROOK
YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: WILDLIFE PARK DRAINAGE (HCFCD F220-02-00)
Project Location/Limits: RED BLUFF ROAD TO PINE GULLY
CIP Number: D4
Facility Type: DRAINAGE

Project Description and Justification

This project would be to widen the existing HCFCD Channel F220-02-00 to provide 100-year flow from the box culverts at Red Bluff to Pine Gully. In 2012, Harris County installed 2- 7-ft x 5-ft reinforced concrete box culverts to improve the stormwater runoff coming from the Baybrook Subdivision. The County installed a restrictor in the box culverts until the downstream channel is improved to handle the additional flow. This is the final piece to that project.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning			\$ 114,095				\$ 114,095
Land/Easements Acq.							\$ -
Construction				\$ 671,148			\$ 671,148
Total Cost	\$ -	\$ -	\$ 114,095	\$ 671,148	\$ -	\$ -	\$ 785,243

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds				\$ 671,148			\$ 671,148
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees			\$ 114,095				\$ 114,095
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ 114,095	\$ 671,148	\$ -	\$ -	\$ 785,243

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Clearing and Grubbing	3	AC	\$ 15,000.00	\$ 45,000.00
Channel Excavation (Add. 20-40ft)	20000	CY	\$ 10.00	\$ 200,000.00
Slope Paving	1000	SY	\$ 60.00	\$ 60,000.00
Backslope Swales and Interceptors	1600	LF	\$ 40.00	\$ 64,000.00
Pedestrian Walk Bridge (12'x100')	1	LS	\$ 150,000.00	\$ 150,000.00
Trails	1600	LF	\$ 15.00	\$ 24,000.00
Project Contingencies (20%)				\$ 108,600.00
Construction Total				\$ 651,600.00

Comments/Special Project Notes:

Coordination and possible funding from Harris County Flood Control, since it is their channel. Improvements would benefit existing subdivision to the south of Red Bluff Road.



D4
WILDLIFE PARK
DRAINAGE EXPANSION

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SEABROOK
YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: BAYBROOK SECTION 1 - DRAINAGE IMPROVEMENTS
Project Location/Limits: BAYBROOK SUBDIVISION
CIP Number: D5
Facility Type: DRAINAGE

Project Description and Justification

The ditches adjacent to the Baybrook Subdivision are overgrown with brush, hindering the flow of water during rain events. This project would increase the channel size, within current limits, and slope pave the channel to provide for better maintenance.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 181,224	\$ 181,224
Land/Easements Acq.							\$ -
Construction						\$ 1,006,800	\$ 1,006,800
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,188,024	\$ 1,188,024

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds						\$ 1,188,024	\$ 1,188,024
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,188,024	\$ 1,188,024

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Slope Paving	9600	SY	\$ 85.00	\$ 816,000.00
Channel Excavation	8000	CY	\$ 20.00	\$ 160,000.00
Clearing & Grubbing	0.75	AC	\$ 40,000.00	\$ 30,000.00
Culverts	250	LF	\$ 100.00	\$ 25,000.00
Project Contingencies (20%)				\$ 206,200.00
Construction Total				\$ 1,237,200.00

Comments/Special Project Notes:

Project may require environmental permitting, due to outfall along Clopper Street.



D5
BAYBROOK SECTION 1
DRAINAGE IMPROVEMENTS

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: LOWER PINE GULLY DRAINAGE IMPROVEMENTS
Project Location/Limits: PINE GULLY AND PINE GULLY TRIBUTARY
CIP Number: D6
Facility Type: DRAINAGE

Project Description and Justification

The project will consist of expanding Pine Gully Channel and Pine Gully Tributary to provide an increase in hydraulic capacity for future development in the surrounding area. Pine Gully Road Bridge will be replaced with prefabricated concrete bridges on Pine Gully Tributary. The pedestrian bridge will also be replaced on Pine Gully Tributary.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning				\$ 518,499			\$ 518,499
Land/Easements Acq.					\$ 200,000	\$ -	\$ 200,000
Construction					\$ 2,073,994	\$ -	\$ 2,073,994
Total Cost	\$ -	\$ -	\$ -	\$ 518,499	\$ 2,273,994	\$ -	\$ 2,792,493

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant				\$ 518,499	\$ 2,273,994	\$ -	\$ 2,792,493
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ 518,499	\$ 2,273,994	\$ -	\$ 2,792,493

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
GENERAL ITEMS				
Mobilization, 5% Maximum of Total Contract Amount	1	LS	\$ 90,000.00	\$ 90,000.00
Clearing and Grubbing	10	AC	\$ 15,000.00	\$ 150,000.00
PINE GULLY CHANNEL TOTAL				
Off and Disposal (170' Wide Channel, 4' Deep, 30' Bottom, 2600)	27000	CY	\$ 30.00	\$ 810,000.00
Hydromulch Seeding	4	AC	\$ 3,000.00	\$ 12,000.00
PINE GULLY TRIBUTARY				
Off and Disposal (40' Wide Channel, 2.5' Deep, 10' Bottom, 1300 LF)	1200	CY	\$ 30.00	\$ 36,000.00
Hydromulch Seeding	1	AC	\$ 3,000.00	\$ 3,000.00
PINE GULLY ROAD BRIDGE				
Prefabricated Concrete Bridge	1	EA	\$ 200,000.00	\$ 200,000.00
Roadway Embankment	400	CY	\$ 30.00	\$ 12,000.00
Remove Pavement	600	SY	\$ 6.00	\$ 3,600.00
Asphalt Pavement Base (Type B)	200	TONS	\$ 100.00	\$ 20,000.00
Asphalt Pavement Final (Type D)	50	TONS	\$ 150.00	7500
Signing and Striping	1	LS	\$ 500.00	\$ 500.00
Temporary Detour	1	LS	\$ 50,000.00	\$ 50,000.00
Sodding	120	SY	\$ 4.00	\$ 480.00
BOARDWALK				
(12'x200')	1	LS	\$ 200,000.00	\$ 200,000.00
Sodding	75	SY	\$ 4.00	\$ 300.00
Project Contingencies (30%)				\$ 478,614.00

Construction Total

\$ 2,073,994.00

Comments/Special Project Notes:

Engineering includes LSLS coastal boundary surveys for permitting with the Texas General Land Office, drainage study, environmental investigation and permitting with USACE. Additional R.O.W. for Tributary from Pine Gully North to Seabrook City Limit will be needed. Baywood Drive Bridge (D10) can be done concurrently or as a separate project on Pine Gully tributary.



D6
LOWER PINE GULLY
DRAINAGE IMPROVEMENTS

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: SURF OAKS DRIVE
Project Location/Limits: SURF OAKS DRIVE FROM TODVILLE RD TO GALVESTON BAY
CIP Number: D8
Facility Type: DRAINAGE

Project Description and Justification

This project would provide an additional drainage outfall for the street via Galveston Bay. Other drainage improvements (ex. ditch expansion, culverts, inlets, etc.) will be included to carry the additional flow to the new outfall.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 65,000	\$ 65,000
Land/Easements Acq.							\$ -
Construction						\$ 280,800	\$ 280,800
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 345,800	\$ 345,800

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees						\$ 345,800	\$ 345,800
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 345,800	\$ 345,800

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Reinforced Concrete Pipe	1100	LF	\$ 110.00	\$ 121,000.00
Remove and Replace Concrete D/W's	1500	SF	\$ 10.00	\$ 15,000.00
Clearing and Grubbing	1	LS	\$ 15,000.00	\$ 15,000.00
Concrete Inlets	5	EA	\$ 4,000.00	\$ 20,000.00
Outfall Structure	1	LS	\$ 20,000.00	\$ 20,000.00
Remove and Replace Fence	1	LS	\$ 15,000.00	\$ 15,000.00
Regrading of Open Ditch Section	1000	LF	\$ 10.00	\$ 10,000.00
Project Contingencies (30%)				\$ 64,800.00
Construction Total				\$ 280,800.00

Comments/Special Project Notes:

Surf Oaks Drive is a public street as of 2014. Improvements are needed to provide better drainage and access during specific rain storm events. Environmental permit will be needed to add outfall into Galveston Bay, included in engineering/planning cost.



0 400' 800'
SCALE: 1" = 400'

D8

SURF OAKS DRIVE

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: DU LAC TRACE, WATER WAY, & SEASCAPE OUTFALL
Project Location/Limits: OUTFALLS LOCATED ON DU LAC TRACE, WATER WAY, & SEASCAPE
CIP Number: D9
Facility Type: DRAINAGE

Project Description and Justification

This project(s) is for improvements to existing outfall structures that are failing due to continued erosion and wave action.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning		\$ 43,063					\$ 43,063
Land/Easements Acq.							\$ -
Construction		\$ 215,313					\$ 215,313
Total Cost	\$ -	\$ 258,375	\$ -	\$ -	\$ -	\$ -	\$ 258,375

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP		\$ 258,375					\$ 258,375
Other: ___ fund			\$ -				\$ -
Total Funding	\$ -	\$ 258,375	\$ -	\$ -	\$ -	\$ -	\$ 258,375

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
DU LAC TRACE OUTFALL				
36" HDPE Storm Pipe	50	LF	\$ 140.00	\$ 7,000.00
Remove 36" CMP	50	LF	\$ 15.00	\$ 750.00
Coffer Dam	1	LS	\$ 15,000.00	\$ 15,000.00
Dewatering	1	LS	\$ 4,000.00	\$ 4,000.00
Outfall Structure	1	LS	\$ 20,000.00	\$ 20,000.00
Remove and Replace Fence	1	LS	\$ 5,000.00	\$ 5,000.00
Replace Existing Storm Manhole	1	LS	\$ 9,000.00	\$ 9,000.00
WATER WAY OUTFALL				
36" HDPE Storm Pipe	50	LF	\$ 140.00	\$ 7,000.00
Remove 36" CMP	50	LF	\$ 15.00	\$ 750.00
Coffer Dam	1	LS	\$ 15,000.00	\$ 15,000.00
Dewatering	1	LS	\$ 4,000.00	\$ 4,000.00
Outfall Structure	1	LS	\$ 20,000.00	\$ 20,000.00
Replace Existing Storm Manhole	1	LS	\$ 9,000.00	\$ 9,000.00
SEASCAPE OUTFALL				
36" HDPE Storm Pipe	50	LF	\$ 140.00	\$ 7,000.00
Remove 36" CMP	50	LF	\$ 15.00	\$ 750.00
Coffer Dam	1	LS	\$ 15,000.00	\$ 15,000.00
Dewatering	1	LS	\$ 4,000.00	\$ 4,000.00
Outfall Structure	1	LS	\$ 20,000.00	\$ 20,000.00
Replace Existing Storm Manhole	1	LS	\$ 9,000.00	\$ 9,000.00

Project Contingencies (25%)	\$ 43,062.50
Construction Total	\$ 215,312.50

Comments/Special Project Notes:



D9
DU LAC TRACE, WATER WAY
& SEASCAPE OUTFALL

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SEABROOK

YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: BAYWOOD BRIDGE IMPROVEMENTS
Project Location/Limits: BAYWOOD DR AND PINE GULLY TRIBUTARY
CIP Number: D10
Facility Type: DRAINAGE

Project Description and Justification

Baywood Drive Bridge will be replaced with prefabricated concrete bridges on Pine Gully Tributary.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning			\$ 185,000				\$ 185,000
Land/Easements Acq.					\$ 200,000		\$ 200,000
Construction					\$ 435,500		\$ 435,500
Total Cost	\$ -	\$ -	\$ 185,000	\$ 635,500	\$ -	\$ -	\$ 820,500

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___harris county			\$ 185,000	\$ 635,500			\$ 820,500
Total Funding	\$ -	\$ -	\$ 185,000	\$ 635,500	\$ -	\$ -	\$ 820,500

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
BAYWOOD DRIVE BRIDGE				
Prefabricated Concrete Bridge	1	EA	\$ 225,000.00	\$ 225,000.00
Roadway Embankment	400	CY	\$ 30.00	\$ 12,000.00
Remove Pavement	600	SY	\$ 6.00	\$ 3,600.00
Asphalt Pavement Base (Type B)	200	TONS	\$ 120.00	\$ 24,000.00
Asphalt Pavement Final (Type D)	50	TONS	\$ 200.00	\$ 10,000.00
Concrete Driveways	100	SY	\$ 85.00	\$ 8,500.00
Signing and Striping	1	LS	\$ 1,000.00	\$ 1,000.00
Temporary Detour	1	LS	\$ 50,000.00	\$ 50,000.00
Tree Protection	1	LS	\$ 500.00	\$ 500.00
Sodding	100	SY	\$ 4.00	\$ 400.00
Project Contingencies (30%)				\$ 100,500.00
Construction Total				\$ 435,500.00

Comments/Special Project Notes:

Engineering includes LSLs coastal boundary surveys for permitting with the Texas General Land Office, drainage study, environmental investigation and permitting with USACE. Additional R.O.W. for Tributary from Pine Gully North to Seabrook City Limit will be needed.



D10
BAYWOOD BRIDGE
IMPROVEMENTS

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Pearland, Texas 77564
281.993.4952 | fax 281.993.8086
www.cobbfendley.com



YEAR: 2018

PROPOSED STREET PROJECTS

FY19 – FY23+

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: BAYBROOK SECTION 1 - BROOKWOOD CT
Project Location/Limits: FROM CURB RETURN OF N. MEYER AVE TO CUL-DE-SAC
CIP Number: S3
Facility Type: STREET

Project Description and Justification

This project is one phase of a three phase project to replace the concrete pavement in Baybrook Section 1.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning	\$ 53,772						\$ 53,772
Land/Easements Acq.							\$ -
Construction	\$ 253,000						\$ 253,000
Total Cost	\$ 306,772	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 306,772

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash	\$ 306,772						\$ 306,772
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ 306,772	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 306,772

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Mobilization	1	LS	\$ 10,500.00	\$ 10,500.00
Tree and Plant Protection	1	LS	\$ 500.00	\$ 500.00
Remove Existing Tree	1	LS	\$ 500.00	\$ 500.00
Remove Existing Misc Pavement	2100	SY	\$ 8.00	\$ 16,800.00
Remove Existing Storm	350	LF	\$ 15.00	\$ 5,250.00
Lime Stabilized Subgrade	1750	SY	\$ 3.75	\$ 6,562.50
Type B, Commerical Lime Slurry	20	TON	\$ 190.00	\$ 3,800.00
6" Black Base (Type B)	36	TON	\$ 140.00	\$ 5,040.00
2" HMAC	12	TON	\$ 175.00	\$ 2,100.00
6" Reinforced Concrete Pavement	1650	SY	\$ 60.00	\$ 99,000.00
Concrete Pavement for Driveways	2860	SF	\$ 6.00	\$ 17,160.00
4 x12" Concrete Curb	900	LF	\$ 5.00	\$ 4,500.00
Concrete Pavement Header	28	LF	\$ 20.00	\$ 560.00
4 1/2" Concrete Sidewalk	264	SF	\$ 8.00	\$ 2,112.00
12-Inch PVC (SDR 26)	120	LF	\$ 68.00	\$ 8,160.00
18-Inch RCP (Type III)	50	LF	\$ 115.00	\$ 5,750.00
Grate Top	2	EA	\$ 200.00	\$ 400.00
Channels	8	SY	\$ 60.00	\$ 480.00
Erosion/Sediment Control	2	EA	\$ 350.00	\$ 700.00
Maintenance	1	LS	\$ 2,000.00	\$ 2,000.00
Inlet Protection Barrier	3	EA	\$ 100.00	\$ 300.00

Sodding for Erosion Control	250	SY	\$ 5.00	\$ 1,250.00
Traffic Control and Regulation	1	LS	\$ 5,000.00	\$ 5,000.00
Cement Stabalized Sand	100	CY	\$ 50.00	\$ 5,000.00
Bank Sand	25	CY	\$ 100.00	\$ 2,500.00
Project Contingencies (10%)				\$ 20,592.45
Construction Total				\$ 226,516.95

Comments/Special Project Notes:

Project Completed.



S3
BAYBROOK SECTION 1
BROOKWOOD CT

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: MIRAMAR STREETS - DOLPHIN DRIVE
Project Location/Limits: FROM BAHAMA DRIVE TO NASSAU DRIVE
CIP Number: S4
Facility Type: STREET

Project Description and Justification

This project is one phase of a four phase project to replace the asphalt pavement in Miramar Subdivision.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 119,504	\$ 119,504
Land/Easements Acq.							
Construction						\$ 628,968	\$ 628,968
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 748,471	\$ 748,471

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds						\$ 748,471	\$ 748,471
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 748,471	\$ 748,471

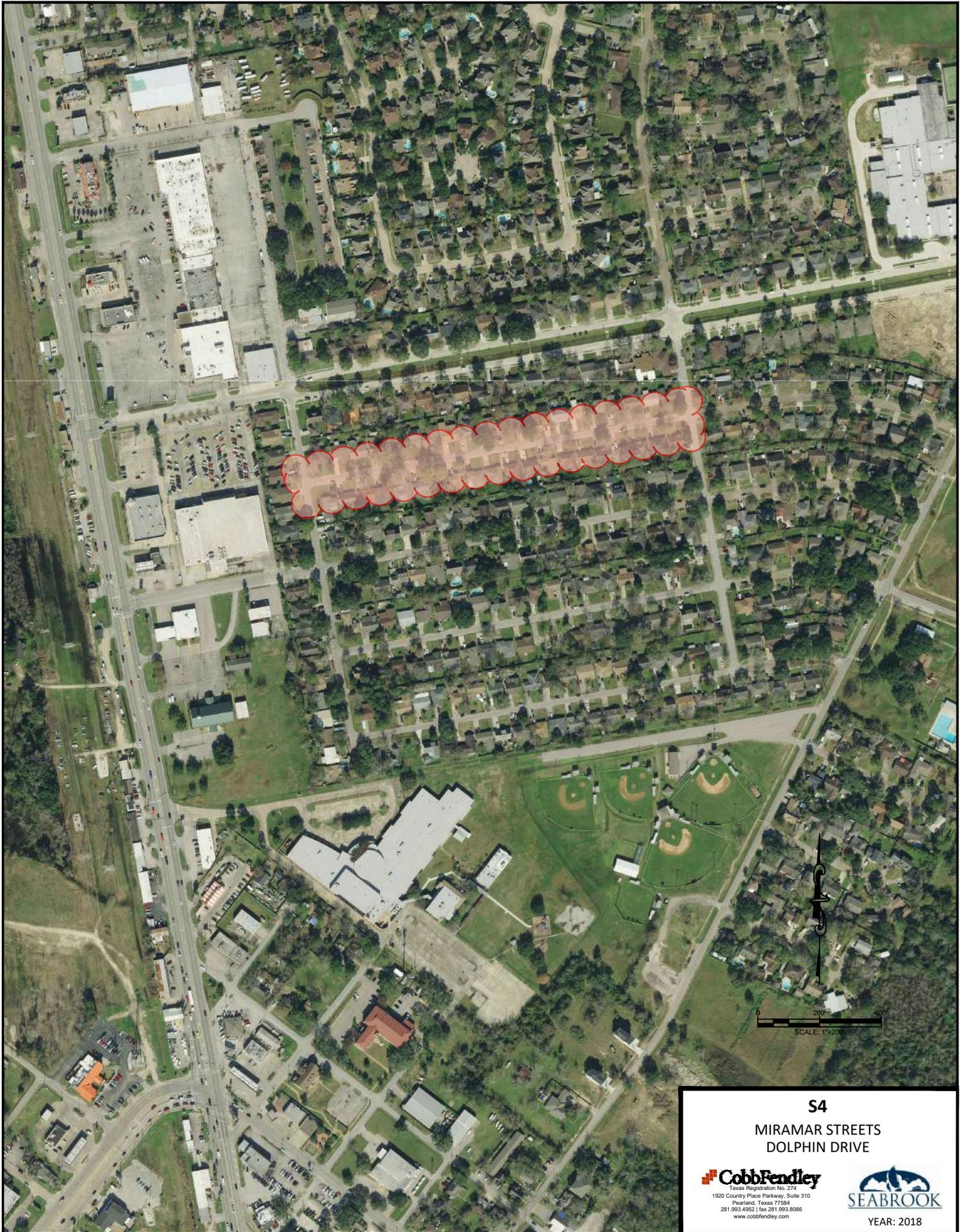
Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Mobilization	1	LS	\$ 25,000.00	\$ 25,000.00
Tree and Plant Protection	1	LS	\$ 500.00	\$ 500.00
Pavement	3951	SY	\$ 7.00	\$ 27,657.78
Remove Existing Driveways & Sidewalks	1231	SY	\$ 6.00	\$ 7,386.67
Remove Existing Pipe	120	LF	\$ 10.00	\$ 1,200.00
Remove Existing Inlets	8	EA	\$ 200.00	\$ 1,600.00
Lime Treatment	4233	SY	\$ 4.50	\$ 19,050.00
Type B, Commerical Lime Slurry	76	TON	\$ 190.00	\$ 14,478.00
1-1/2 Inch Asphalt Pavement	326	TON	\$ 100.00	\$ 32,596.67
6-Inch Black Base	1397	TON	\$ 145.00	\$ 202,565.00
Concrete Pavement for Driveways	10800	SF	\$ 6.00	\$ 64,800.00
Concrete Curb with Valley Gutter	2540	LF	\$ 12.00	\$ 30,480.00
4 1/2" Concrete Sidewalk	280	SF	\$ 8.00	\$ 2,240.00
Reinforced Concrete Pipe	120	LF	\$ 100.00	\$ 12,000.00
Type C Inlet	4	EA	\$ 3,750.00	\$ 15,000.00
Type A Inlet	4	EA	\$ 3,500.00	\$ 14,000.00
Erosion/Sediment Control	2	EA	\$ 350.00	\$ 700.00
Maintenance	1	LS	\$ 2,000.00	\$ 2,000.00
Inlet Protection Barrier	8	EA	\$ 75.00	\$ 600.00

Sodding for Erosion Control	5080	SY	\$ 4.00	\$ 20,320.00
Traffic Control and Regulation	1	LS	\$ 9,000.00	\$ 9,000.00
Project Contingencies (25%)				\$ 125,793.53
Construction Total				\$ 628,967.64

Comments/Special Project Notes:

S4, S5, S6, and S7 may be constructed in any order desired by the city.



S4

MIRAMAR STREETS
DOLPHIN DRIVE


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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: MIRAMAR STREETS - CAPRI LANE
Project Location/Limits: FROM BAHAMA DRIVE TO NASSAU DRIVE
CIP Number: S5
Facility Type: STREET

Project Description and Justification

This project is one phase of a four phase project to replace the asphalt pavement in Miramar Subdivision.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 118,389	\$ 118,389
Land/Easements Acq.							\$ -
Construction						\$ 623,101	\$ 623,101
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 741,490	\$ 741,490

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds						\$ 741,490	\$ 741,490
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 741,490	\$ 741,490

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Mobilization	1	LS	\$ 25,000.00	\$ 25,000.00
Tree and Plant Protection	1	LS	\$ 500.00	\$ 500.00
Pavement	3951	SY	\$ 7.00	\$ 27,657.78
Remove Existing Driveways & Sidewalks	1156	SY	\$ 6.00	\$ 6,933.33
Remove Existing Pipe	120	LF	\$ 10.00	\$ 1,200.00
Remove Existing Inlets	8	EA	\$ 200.00	\$ 1,600.00
Lime Treatment	4233	SY	\$ 4.50	\$ 19,050.00
Type B, Commerical Lime Slurry	76	TON	\$ 190.00	\$ 14,478.00
1-1/2 Inch Asphalt Pavement	326	TON	\$ 100.00	\$ 32,596.67
6-Inch Black Base	1397	TON	\$ 145.00	\$ 202,565.00
Concrete Pavement for Driveways	10200	SF	\$ 6.00	\$ 61,200.00
Concrete Curb with Valley Gutter	2540	LF	\$ 12.00	\$ 30,480.00
4 1/2" Concrete Sidewalk	200	SF	\$ 8.00	\$ 1,600.00
Reinforced Concrete Pipe	120	LF	\$ 100.00	\$ 12,000.00
Type C Inlet	4	EA	\$ 3,750.00	\$ 15,000.00
Type A Inlet	4	EA	\$ 3,500.00	\$ 14,000.00
Erosion/Sediment Control	2	EA	\$ 350.00	\$ 700.00
Maintenance	1	LS	\$ 2,000.00	\$ 2,000.00
Inlet Protection Barrier	8	EA	\$ 75.00	\$ 600.00
Sodding for Erosion Control	5080	SY	\$ 4.00	\$ 20,320.00

Traffic Control and Regulation	1	LS	\$ 9,000.00	\$ 9,000.00
Project Contingencies (25%)				\$ 124,620.19
Construction Total				\$ 623,100.97

Comments/Special Project Notes:

S4, S5, S6, and S7 may be constructed in any order desired by the city.



0 200 400
SCALE: 1"=200'

S5
MIRAMAR STREETS
CAPRI LANE

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: MIRAMAR STREETS - BIMINI WAY
Project Location/Limits: FROM BAHAMA DRIVE TO NASSAU DRIVE
CIP Number: S6
Facility Type: STREET

Project Description and Justification

This project is one phase of a four phase project to replace the asphalt pavement in Miramar Subdivision.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 119,257	\$ 119,257
Land/Easements Acq.							\$ -
Construction						\$ 627,668	\$ 627,668
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 746,924	\$ 746,924

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds						\$ 746,924	\$ 746,924
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 746,924	\$ 746,924

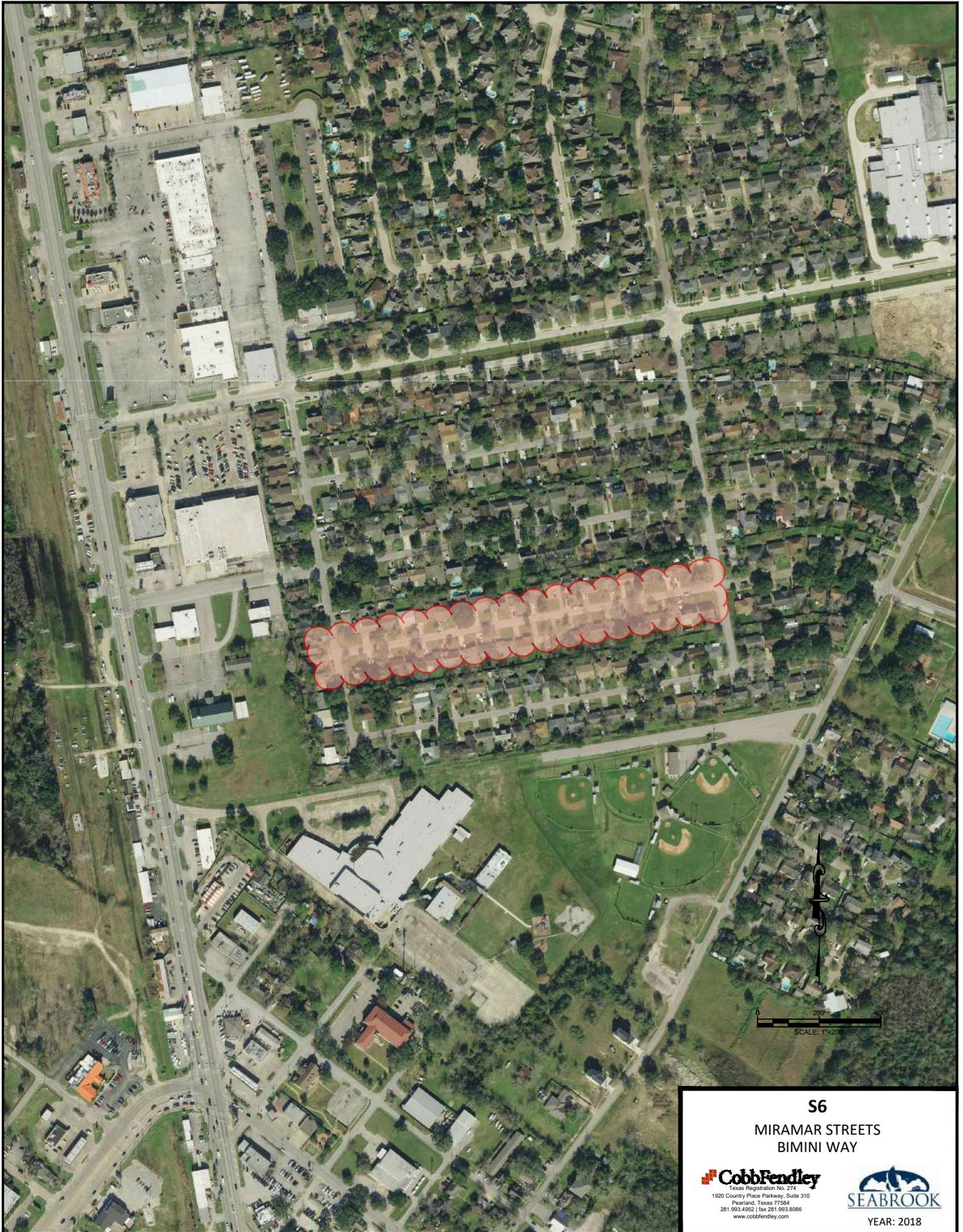
Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Mobilization	1	LS	\$ 25,000.00	\$ 25,000.00
Tree and Plant Protection	1	LS	\$ 500.00	\$ 500.00
Pavement	3951	SY	\$ 7.00	\$ 27,657.78
Remove Existing Driveways & Sidewalks	1218	SY	\$ 6.00	\$ 7,306.67
Remove Existing Pipe	120	LF	\$ 10.00	\$ 1,200.00
Remove Existing Inlets	8	EA	\$ 200.00	\$ 1,600.00
Lime Treatment	4233	SY	\$ 4.50	\$ 19,050.00
Type B, Commerical Lime Slurry	76	TON	\$ 190.00	\$ 14,478.00
1-1/2 Inch Asphalt Pavement	326	TON	\$ 100.00	\$ 32,596.67
6-Inch Black Base	1397	TON	\$ 145.00	\$ 202,565.00
Concrete Pavement for Driveways	10800	SF	\$ 6.00	\$ 64,800.00
Concrete Curb with Valley Gutter	2540	LF	\$ 12.00	\$ 30,480.00
4 1/2" Concrete Sidewalk	160	SF	\$ 8.00	\$ 1,280.00
Reinforced Concrete Pipe	120	LF	\$ 100.00	\$ 12,000.00
Type C Inlet	4	EA	\$ 3,750.00	\$ 15,000.00
Type A Inlet	4	EA	\$ 3,500.00	\$ 14,000.00
Erosion/Sediment Control	2	EA	\$ 350.00	\$ 700.00
Maintenance	1	LS	\$ 2,000.00	\$ 2,000.00
Inlet Protection Barrier	8	EA	\$ 75.00	\$ 600.00
Sodding for Erosion Control	5080	SY	\$ 4.00	\$ 20,320.00

Traffic Control and Regulation	1	LS	\$ 9,000.00	\$ 9,000.00
Project Contingencies (25%)				\$ 125,533.53
Construction Total				\$ 627,667.64

Comments/Special Project Notes:

S4, S5, S6, and S7 may be constructed in any order desired by the city.



0 200 400
SCALE: 1"=200'

S6
MIRAMAR STREETS
BIMINI WAY

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: MIRAMAR STREETS - ASPEN LANE
Project Location/Limits: FROM BAHAMA DRIVE TO NASSAU DRIVE
CIP Number: S7
Facility Type: STREET

Project Description and Justification

This project is one phase of a four phase project to replace the asphalt pavement in Miramar Subdivision.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 120,042	\$ 120,042
Land/Easements Acq.							\$ -
Construction						\$ 631,801	\$ 631,801
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 751,843	\$ 751,843

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds						\$ 751,843	\$ 751,843
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 751,843	\$ 751,843

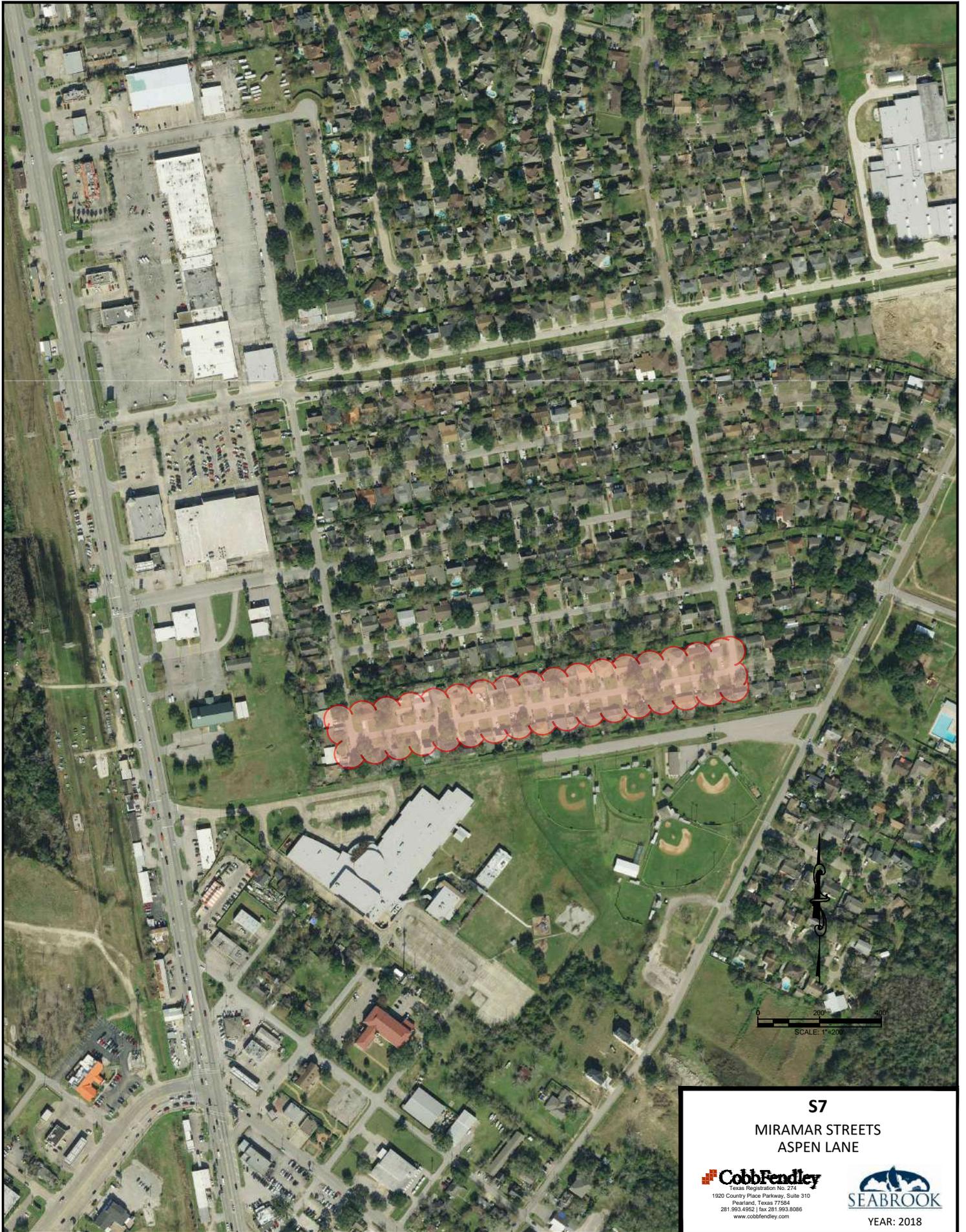
Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Mobilization	1	LS	\$ 25,000.00	\$ 25,000.00
Tree and Plant Protection	1	LS	\$ 500.00	\$ 500.00
Pavement	3951	SY	\$ 7.00	\$ 27,657.78
Remove Existing Driveways & Sidewalks	1276	SY	\$ 6.00	\$ 7,653.33
Remove Existing Pipe	120	LF	\$ 10.00	\$ 1,200.00
Remove Existing Inlets	8	EA	\$ 200.00	\$ 1,600.00
Lime Treatment	4233	SY	\$ 4.50	\$ 19,050.00
Type B, Commerical Lime Slurry	76	TON	\$ 190.00	\$ 14,478.00
1-1/2 Inch Asphalt Pavement	326	TON	\$ 100.00	\$ 32,596.67
6-Inch Black Base	1397	TON	\$ 145.00	\$ 202,565.00
Concrete Pavement for Driveways	11400	SF	\$ 6.00	\$ 68,400.00
Concrete Curb with Valley Gutter	2540	LF	\$ 12.00	\$ 30,480.00
4 1/2" Concrete Sidewalk	80	SF	\$ 8.00	\$ 640.00
Reinforced Concrete Pipe	120	LF	\$ 100.00	\$ 12,000.00
Type C Inlet	4	EA	\$ 3,750.00	\$ 15,000.00
Type A Inlet	4	EA	\$ 3,500.00	\$ 14,000.00
Erosion/Sediment Control	2	EA	\$ 350.00	\$ 700.00
Maintenance	1	LS	\$ 2,000.00	\$ 2,000.00
Inlet Protection Barrier	8	EA	\$ 75.00	\$ 600.00
Sodding for Erosion Control	5080	SY	\$ 4.00	\$ 20,320.00

Traffic Control and Regulation	1	LS	\$ 9,000.00	\$ 9,000.00
Project Contingencies (25%)				\$ 126,360.19
Construction Total				\$ 631,800.97

Comments/Special Project Notes:

S4, S5, S6, and S7 may be constructed in any order desired by the city.



0 200 400
SCALE: 1"=200'



S7
MIRAMAR STREETS
ASPEN LANE

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: SEASCAPE II STREET IMPROVEMENTS
Project Location/Limits: ALL STREETS (W. FLAMINGO, N. HERON, ALBATROSS, SANDPIPER, ALLEGRO, BEEHCRAFT, CORONADO)
CIP Number: S8
Facility Type: STREET

Project Description and Justification

This project will replace all the concrete paved streets, sidewalks, and driveways within the Seascape II subdivision. These roads were paved in the early 1960s and late 1970s.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning			\$ 735,642				\$ 735,642
Land/Easements Acq.							\$ -
Construction			\$ 1,839,106	\$ 1,839,106			\$ 3,678,212
Total Cost	\$ -	\$ -	\$ 2,574,748	\$ 1,839,106	\$ -	\$ -	\$ 4,413,855

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds			\$ 2,574,748	\$ 1,839,106			\$ 4,413,855
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ 2,574,748	\$ 1,839,106	\$ -	\$ -	\$ 4,413,855

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Mobilization	1	LS	\$ 75,000.00	\$ 75,000.00
Tree and Plant Protection	1	LS	\$ 3,000.00	\$ 3,000.00
Pavement	23854	SY	\$ 8.00	\$ 190,832.00
Remove Existing Driveways & Sidewalks	5430	SY	\$ 8.00	\$ 43,440.00
Lime Stabilized Subgrade	25762	SY	\$ 4.25	\$ 109,489.86
Type B, Commerical Lime Slurry	464	TON	\$ 190.00	\$ 88,107.13
6" Black Base (Type B)	110	TON	\$ 100.00	\$ 11,000.00
2" HMAc	40	TON	\$ 175.00	\$ 7,000.00
6" Reinforced Concrete Pavement	23854	SY	\$ 60.00	\$ 1,431,240.00
Concrete Pavement for Driveways	48870	SF	\$ 7.00	\$ 342,090.00
4 x12" Concrete Curb	14950	LF	\$ 5.00	\$ 74,750.00
4 1/2" Concrete Sidewalk	32300	SF	\$ 8.00	\$ 258,400.00
Inlet	20	EA	\$ 3,500.00	\$ 70,000.00
Concrete Pipe	2000	LF	\$ 115.00	\$ 230,000.00
Manhole	10	EA	\$ 4,000.00	\$ 40,000.00
Channels	130	SY	\$ 60.00	\$ 7,800.00
Erosion/Sediment Control	2	EA	\$ 350.00	\$ 700.00
Maintenance	1	LS	\$ 5,000.00	\$ 5,000.00
Inlet Protection Barrier	8	EA	\$ 100.00	\$ 800.00
Reinforced Filter Fabric Fence	2000	LF	\$ 5.00	\$ 10,000.00
Sodding for Erosion Control	8306	SY	\$ 5.00	\$ 41,527.78
Traffic Control and Regulation	1	LS	\$ 25,000.00	\$ 25,000.00
Project Contingencies (20%)				\$ 613,035.35
Construction Total				\$ 3,678,212.13

Comments/Special Project Notes:

This project can be spilt into multiple phases if necessary.



0 500' 1000'
SCALE: 1" = 500'

S8
SEASCAPE II STREET
IMPROVEMENTS

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SEABROOK
YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: BAYBROOK SECTION III STREET IMPROVEMENTS
Project Location/Limits: ALL STREETS (KILLDER, SOUTH HERON, EGRET, KINGFISH, SPOONBILL, PLOVER, SANDCRANE, SEABIRD)
CIP Number: S9
Facility Type: STREET

Project Description and Justification

This project is to replace all of the concrete paved streets, sidewalks, and driveways within Baybrook Subdivision Section III. These roads were paved in the late 1970s.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning				\$ 657,519			\$ 657,519
Land/Easements Acq.							\$ -
Construction				\$ 821,899	\$ 2,465,696		\$ 3,287,595
Total Cost	\$ -	\$ -	\$ -	\$ 1,479,418	\$ 2,465,696	\$ -	\$ 3,945,114

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds				\$ 1,479,418	\$ 2,465,696		\$ 3,945,114
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ 1,479,418	\$ 2,465,696	\$ -	\$ 3,945,114

Description	Quantity	Unit	Unit Price	Total Cost
Mobilization	1	LS	\$ 80,000.00	\$ 80,000.00
Tree and Plant Protection	1	LS	\$ 3,000.00	\$ 3,000.00
Pavement	19288	SY	\$ 8.00	\$ 154,304.00
Remove Existing Driveways & Sidewalks	4950	SY	\$ 8.00	\$ 39,600.00
Lime Stabilized Subgrade	20831	SY	\$ 4.25	\$ 88,531.92
Type B, Commerical Lime Slurry	375	TON	\$ 190.00	\$ 71,242.16
6" Black Base (Type B)	20	TON	\$ 100.00	\$ 2,000.00
2" HMAc	60	TON	\$ 175.00	\$ 10,500.00
6" Reinforced Concrete Pavement	19288	SY	\$ 60.00	\$ 1,157,280.00
Concrete Pavement for Driveways	44550	SF	\$ 7.00	\$ 311,850.00
4 x12" Concrete Curb	12418	LF	\$ 5.00	\$ 62,090.00
4 1/2" Concrete Sidewalk	38820	SF	\$ 8.00	\$ 310,560.00
Inlet	22	EA	\$ 3,500.00	\$ 77,000.00
Concrete Pipe	2224	LF	\$ 115.00	\$ 255,760.00
Manhole	10	EA	\$ 4,000.00	\$ 40,000.00
Channels	60	SY	\$ 60.00	\$ 3,600.00
Erosion/Sediment Control	2	EA	\$ 350.00	\$ 700.00
Maintenance	1	LS	\$ 5,000.00	\$ 5,000.00
Inlet Protection Barrier	22	EA	\$ 100.00	\$ 2,200.00
Reinforced Filter Fabric Fence	2000	LF	\$ 5.00	\$ 10,000.00
Sodding for Erosion Control	6889	SY	\$ 5.00	\$ 34,444.44
Traffic Control and Regulation	1	LS	\$ 20,000.00	\$ 20,000.00
Project Contingencies (20%)				\$ 547,932.50
Construction Total				\$ 3,287,595.03

Comments/Special Project Notes:

This project could be spilt into multiple phases if necessary.



0 500' 1000'
SCALE: 1" = 500'

S9
BAYBROOK SECTION III STREET
IMPROVEMENTS

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: MARVIN CIRCLE
Project Location/Limits: FROM PROPOSED ROW TO CUL-DE-SAC
CIP Number: S10
Facility Type: STREET

Project Description and Justification

This project is to replace the existing concrete pavement, curb, and driveways with 8" concrete pavement and 4"x12" curb. The existing water line will be replaced with an 8" water line; existing inlets and associated drainage will be replaced.

Project Cost Estimates:

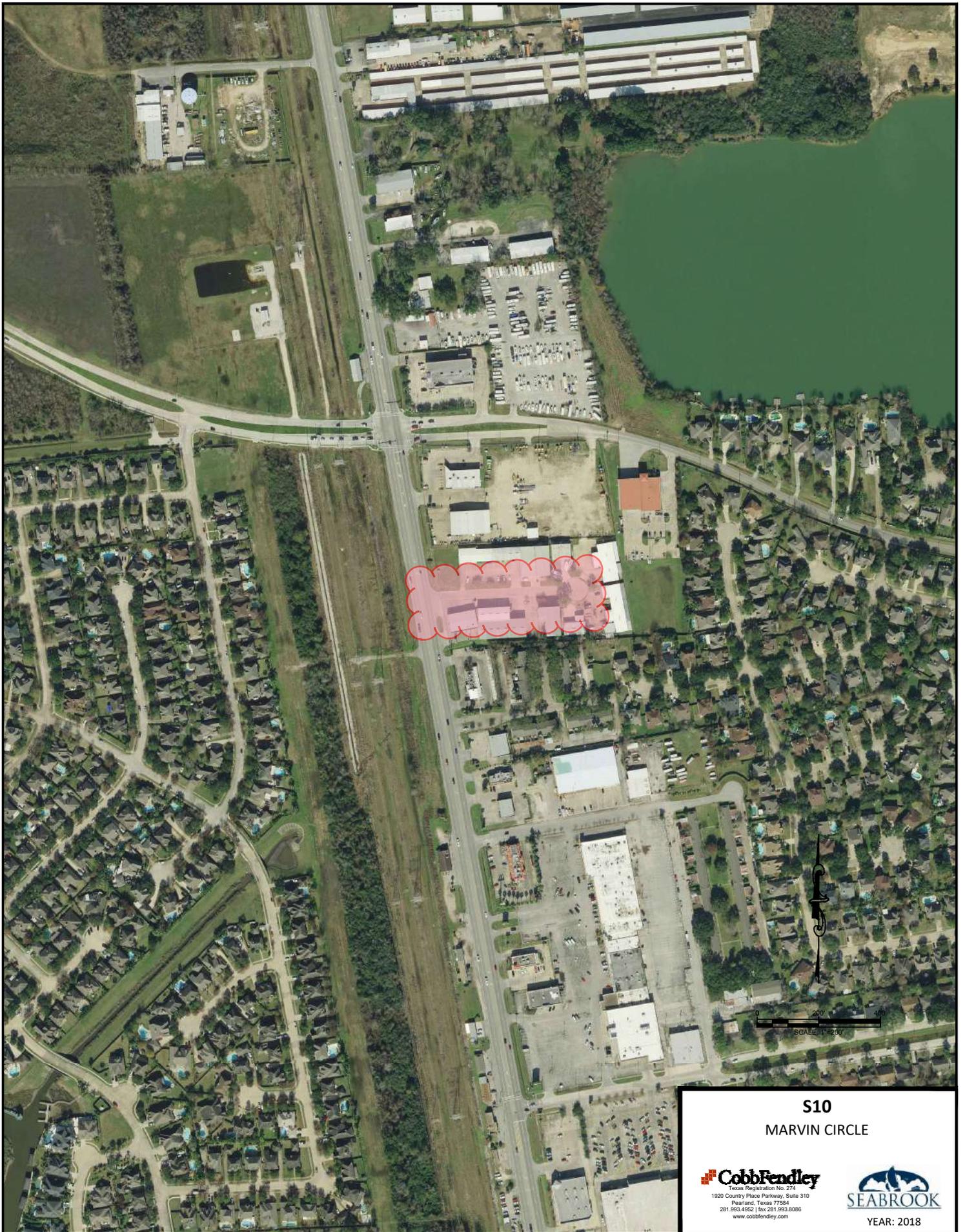
Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning		\$ 42,494					\$ 42,494
Land/Easements Acq.							\$ -
Construction		\$ 212,468					\$ 212,468
Total Cost	\$ -	\$ 254,961	\$ -	\$ -	\$ -	\$ -	\$ 254,961

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash		\$ 254,961					\$ 254,961
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ 254,961	\$ -	\$ -	\$ -	\$ -	\$ 254,961

Description	Quantity	Unit	Unit Price	Total Cost
Mobilization	1	LS	\$ 10,000.00	\$ 10,000.00
Tree and Plant Protection	1	LS	\$ 3,000.00	\$ 3,000.00
Pavement	1665	SY	\$ 8.00	\$ 13,320.00
Remove Existing Driveways	300	SY	\$ 8.00	\$ 2,400.00
Lime Stabilized Subgrade	1778	SY	\$ 4.25	\$ 7,556.50
Type B, Commerical Lime Slurry	32	TON	\$ 190.00	\$ 6,080.00
6" Black Base (Type B)	55	TON	\$ 100.00	\$ 5,500.00
2" HMAC	18	TON	\$ 175.00	\$ 3,150.00
8" Reinforced Concrete Pavement	300	SY	\$ 60.00	\$ 18,000.00
Concrete Pavement for Driveways	2700	SF	\$ 7.00	\$ 18,900.00
4 x12" Concrete Curb	1000	LF	\$ 5.00	\$ 5,000.00
Type C Inlet	2	EA	\$ 3,750.00	\$ 7,500.00
Concrete Pipe	200	LF	\$ 115.00	\$ 23,000.00
Wet Connection to Existing WL	1	EA	\$ 3,500.00	\$ 3,500.00
8-Inch PVC Water Line	500	LF	\$ 50.00	\$ 25,000.00
Fire Hydrant Assembly	1	EA	\$ 4,500.00	\$ 4,500.00
Water Services	8	EA	\$ 1,200.00	\$ 9,600.00
Erosion/Sediment Control	2	EA	\$ 350.00	\$ 700.00
SWPPP Inspection and Maintenance	1	LS	\$ 5,000.00	\$ 5,000.00
Inlet Protection Barrier	2	EA	\$ 100.00	\$ 200.00
Sodding for Erosion Control	30	SY	\$ 5.00	\$ 150.00
Traffic Control and Regulation	1	LS	\$ 5,000.00	\$ 5,000.00

Project Contingencies (20%)	\$ 35,411.30
Construction Total	\$ 212,467.80

Comments/Special Project Notes:



S10
MARVIN CIRCLE

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YEAR: 2018

PROPOSED FACILITY PROJECTS
FY19 – FY23+

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM
Project Location/Limits: CITY OWNED FACILITIES
CIP Number: FAC1
Facility Type: COMPUTERS AND SOFTWARE

Project Description and Justification

The existing SCADA system monitors and controls the City's lift stations, water plants, and wastewater plant. The system has reached the end of its useful life. This project includes a master computer station, remote terminal units, software, licensing, cellular based communications, programmable controllers for 3 Water Plants, 21 Lift Stations, 2 Wastewater Plants, and 2 Surface Water Delivery Stations.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning							\$ -
Land/Easements Acq.							\$ -
Construction		\$ 446,000	\$ 395,651				\$ 841,651
Total Cost	\$ -	\$ 446,000	\$ 395,651				\$ 841,651

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation		\$ 446,000					\$ 446,000
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)			\$ 395,651				\$ 395,651
Total Funding	\$ -	\$ 446,000	\$ 395,651				\$ 841,651

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Mobilization	1	LS	\$ 24,000.00	\$ 24,000.00
software with licensing	1	LS	\$ 50,000.00	\$ 50,000.00
Lift Station remote terminal units, telemetry, antenna, and programming	21	EA	\$ 15,000.00	\$ 315,000.00
Water Plant remote terminal units, telemetry, antenna, and programming	3	EA	\$ 25,000.00	\$ 75,000.00
Surface Water Delivery Station remote terminal units, telemetry, antenna, and programming	2	EA	\$ 15,000.00	\$ 30,000.00
Wastewater Plant remote terminal units, telemetry, antenna, and programming	2	EA	\$ 35,000.00	\$ 70,000.00
Cellular service set up with modem	29	EA	\$ 200.00	\$ 5,800.00
Project Contingencies (25%)				\$ 142,450.00
Construction Total				\$ 712,250.00

Comments/Special Project Notes:

The Master Station can be installed in the building of the City's choice. Cell phone service is estimated to be \$45/month per site.

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: CITY HALL PARKING LOT
Project Location/Limits: NORTHWEST CORNER OF FIRST STREET AND COOK AVENUE
CIP Number: FAC2
Facility Type: PARKING LOT

Project Description and Justification

The parking lot will increase the capacity of parking for City Hall due to an increase in visitors.

Project Cost Estimates:

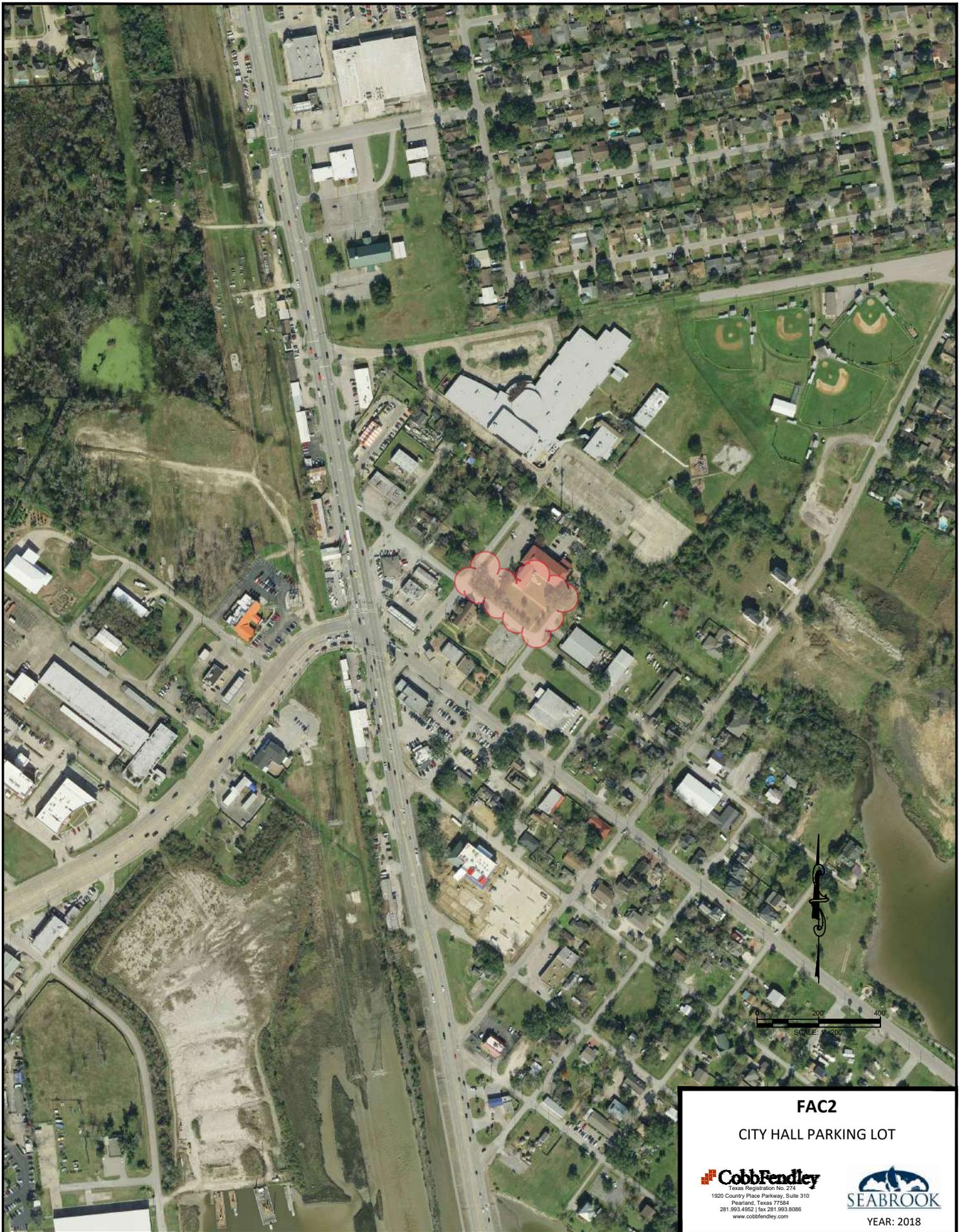
Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 36,554	\$ 36,554
Land/Easements Acq.							\$ -
Construction						\$ 182,770	\$ 182,770
Total Cost						\$ 219,324	\$ 219,324

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash						\$ 219,324	\$ 219,324
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 219,324	\$ 219,324

Description	Quantity	Unit	Unit Price	Total Cost
Mobilization	1	LS	\$ 6,000.00	\$ 6,000.00
Tree Removal	1	LS	\$ 500.00	\$ 500.00
Remove Concrete Sidewalk	140	SY	\$ 6.00	\$ 838.67
Lime Stabilized Subgrade	1060	SY	\$ 4.00	\$ 4,240.44
Type A, Hydrated Lime	19	TON	\$ 190.00	\$ 3,625.58
6" Reinforced Concrete Pavement	1010	SY	\$ 55.00	\$ 55,556.11
6" Concrete Curb	410	LF	\$ 3.50	\$ 1,435.00
4 1/2" Concrete Sidewalk	2000	SF	\$ 8.00	\$ 16,000.00
Reinforced Concrete Pipe	160	LF	\$ 100.00	\$ 16,000.00
Inlet	2	EA	\$ 3,500.00	\$ 7,000.00
Curb/Wheel Stop	29	EA	\$ 60.00	\$ 1,740.00
4" Yellow Stripe	520	LF	\$ 1.50	\$ 780.00
Handicap Ramp	1	EA	\$ 2,000.00	\$ 2,000.00
Handicap Sign	2	EA	\$ 200.00	\$ 400.00
Light Poles	4	EA	\$ 3,500.00	\$ 14,000.00
Lights	1	LS	\$ 10,000.00	\$ 10,000.00
SWPPP	1	LS	\$ 2,000.00	\$ 2,000.00
Sodding	820	SY	\$ 5.00	\$ 4,100.00
Project Contingencies (25%)				\$ 36,553.95
Construction Total				\$ 182,769.75

Comments/Special Project Notes:

Constructing with asphalt pavement would result in an approx 10% cost reduction from concrete.



FAC2

CITY HALL PARKING LOT

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YEAR: 2018



FAC2
CITY HALL PARKING LOT
23 SPACES

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: MIRAMAR PARK PARKING LOT
Project Location/Limits: Southeast Corner of N. Meyer Avenue and Hammer Street
CIP Number: FAC4
Facility Type: PARKING LOT

Project Description and Justification

The parking lot will increase the capacity of parking for Miramar Park due to an increase in visitors.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning						\$ 66,557	\$ 66,557
Land/Easements Acq.							\$ -
Construction						\$ 332,787	\$ 332,787
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 399,345	\$ 399,345

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)						\$ 399,345	\$ 399,345
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 399,345	\$ 399,345

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Mobilization	1	LS	\$ 10,000.00	\$ 10,000.00
Tree Removal	1	LS	\$ 5,000.00	\$ 5,000.00
Lime Treatment	2944	SY	\$ 4.00	\$ 11,775.11
Type A, Hydrated Lime	53	TON	\$ 190.00	\$ 10,067.72
5" Reinforced Concrete Pavement	2889	SY	\$ 55.00	\$ 158,895.00
6" Concrete Curb	773	LF	\$ 3.50	\$ 2,705.50
Reinforced Concrete Pipe	200	LF	\$ 100.00	\$ 20,000.00
Inlet	4	EA	\$ 3,000.00	\$ 12,000.00
Curb/Wheel Stop	56	EA	\$ 60.00	\$ 3,360.00
4" Yellow Stripe	1240	LF	\$ 1.50	\$ 1,860.00
Handicap Ramp	1	EA	\$ 2,000.00	\$ 2,000.00
Handicap Sign	6	EA	\$ 200.00	\$ 1,200.00
Light Poles	4	EA	\$ 3,500.00	\$ 14,000.00
Electrical System for Parking Lot Lights	1	LS	\$ 10,000.00	\$ 10,000.00
SWPPP	1	LS	\$ 2,000.00	\$ 2,000.00
Sodding	273	SY	\$ 5.00	\$ 1,366.67
Project Contingencies (25%)				\$ 66,557.50
Construction Total				\$ 332,787.50

Comments/Special Project Notes:

Constructing with asphalt pavement would result in an approx. 10% cost reduction from concrete.



0 200' 400'
SCALE: 1"=200'

FAC4
MIRIMAR PARK
PARKING LOT

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YEAR: 2018



FAC4

MIRIMAR PARK PARKING LOT
56 SPACES

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: SMART WATER METER CONVERSION
Project Location/Limits: CITY OWNED FACILITIES
CIP Number: FAC6
Facility Type: WATER METER

Project Description and Justification

Neptune AMI water meter conversion program will upgrade manual read water meters to AMI type installations. Project will also include the implementation of behavior-based software – such as WaterSmart, DropCount, or other providers – using the data provided by the AMI system. This software will help customers identify leaks on the customer side of the meter, and will also promote municipal conservation measures appropriate to their homes or facilities. This project includes replacing approximately 50% of the City's water meters and the remaining 50% will be retrofitted.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning							\$ -
Land/Easements Acq.							\$ -
Construction		\$ 2,162,556					\$ 2,162,556
Total Cost	\$ -	\$ 2,162,556	\$ -	\$ -	\$ -	\$ -	\$ 2,162,556

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation		\$ 2,162,556					\$ 2,162,556
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ____ (Fund/Agency)						\$ -	\$ -
Total Funding	\$ -	\$ 2,162,556	\$ -	\$ -	\$ -	\$ -	\$ 2,162,556

Description	Opinion of Probable Construction Cost Estimate			Total Cost
	Quantity	Unit	Unit Price	
Infrastructure				
5/8x3/4 Neptune R900i registers. 5y or younger	997	EA	\$ 195.00	\$ 194,415.00
5/8x3/4 Neptune Water Meters w/R900i. 6y or older	2326	EA	\$ 230.00	\$ 534,980.00
¾ Neptune R900i registers. 5y or younger	272	EA	\$ 195.00	\$ 53,040.00
¾ Neptune Water Meters w/R900i. 6y or older	345	EA	\$ 300.00	\$ 103,500.00
1" Neptune R900i registers. 5y or younger	71	EA	\$ 195.00	\$ 13,845.00
1" Neptune Water Meters w/R900i. 6y or older	126	EA	\$ 352.00	\$ 44,352.00
1-1/2" Neptune R900i registers. 5y or younger	10	EA	\$ 195.00	\$ 1,950.00
w/R900i. 6y or older	38	EA	\$ 555.00	\$ 21,090.00
2" Neptune R900i registers. 5y or younger	19	EA	\$ 195.00	\$ 3,705.00
2" Neptune Water Meters w/R900i. 6y or older	63	EA	\$ 689.00	\$ 43,407.00
2" Neptune TruFlo Comp Meter w/R900i. 6y or older	1	EA	\$ 1,782.00	\$ 1,782.00
R900i register (x2). 5y or younger	3	EA	\$ 390.00	\$ 1,170.00

3" Neptune TruFlo Comp. Meter w/R900i. 6y or older	12	EA	\$ 2,410.00	\$ 28,920.00
4" Neptune TruFlo Comp. meter w/R900i. 6y or older	2	EA	\$ 3,025.00	\$ 6,050.00
6" Neptune TruFlo Comp. meter w/R900i. 6y or older	5	EA	\$ 4,850.00	\$ 24,250.00
10" Neptune Protectus III Water Meter register (x2). 5y or younger	1	EA	\$ 390.00	\$ 390.00
3" Neptune bronze strainer	12	EA	\$ 675.00	\$ 8,100.00
4" Neptune bronze strainer	2	EA	\$ 907.00	\$ 1,814.00
6" Neptune bronze strainer	5	EA	\$ 1,769.00	\$ 8,845.00
MRX920 Drive –By unit. Less laptop	1	EA	\$ 6,875.00	\$ 6,875.00
Server, Per Neptune specs	1	EA	\$ 10,000.00	\$ 10,000.00
Mono Poles, set in place	5	EA	\$ 30,000.00	\$ 150,000.00
Gateway w/AC power (Cell and Ethernet)	5	EA	\$ 11,000.00	\$ 55,000.00
N_Sight 5.0 Software	1	EA	\$ 6,250.00	\$ 6,250.00
Training	1	EA	\$ 5,000.00	\$ 5,000.00
Installation				
Retrofit 5/8"x3/4" meter 5 years and younger w/R900i	1377	EA	\$ 45.00	\$ 61,965.00
Install new 5/8x3/4 R900i meter on 6 year or older	2326	EA	\$ 60.00	\$ 139,560.00
Retrofit 3/4" meter 5 years and younger w/R900i	271	EA	\$ 45.00	\$ 12,195.00
Install new 3/4 R900i meter on 6 year or older	345	EA	\$ 60.00	\$ 20,700.00
Retrofit 1" meter 5 year and younger w/R900i	71	EA	\$ 45.00	\$ 3,195.00
Install new 1" R900i meter on 6 year or older	126	EA	\$ 60.00	\$ 7,560.00
younger w/R900i	10	EA	\$ 45.00	\$ 450.00
Install new 1 1/2 R900i meter on 6 years or older	38	EA	\$ 60.00	\$ 2,280.00
Retrofit 2" meter 5 years and younger w/R900i	19	EA	\$ 45.00	\$ 855.00
year or older	63	EA	\$ 60.00	\$ 3,780.00
Install new 2 R900i compound meter 6 years or older	1	EA	\$ 300.00	\$ 300.00
Retrofit 3" compound meter 5 years or younger w/R900i	3	EA	\$ 90.00	\$ 270.00
years or older	12	EA	\$ 450.00	\$ 5,400.00
years or older	2	EA	\$ 650.00	\$ 1,300.00
years or older	5	EA	\$ 1,000.00	\$ 5,000.00
Retrofit 10" Protectus Meter w/r900i register	1	EA	\$ 90.00	\$ 90.00
Project Contingencies (15%)				\$ 239,044.50
Construction Total				\$ 1,832,674.50

Comments/Special Project Notes:

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: PUBLIC SAFETY INSPECTION AREA (SH 146)

Project Location/Limits: North of Red Bluff underpass turnaround at SH 146

CIP Number: FAC7

Facility Type: PARKING LOT

Project Description and Justification

This parking area will allow public safety officers to inspect commercial vehicles for compliance in an area that will allow vehicles to safely park outside of traffic lanes.

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Engineering/Planning		\$ 54,382					\$ 54,382
Land/Easements Acq.							\$ -
Construction		\$ 271,912					\$ 271,912
Total Cost	\$ -	\$ 326,294	\$ -	\$ -	\$ -	\$ -	\$ 326,294

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP		\$ 326,294					\$ 326,294
Other: ___ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ 326,294	\$ -	\$ -	\$ -	\$ -	\$ 326,294

Description	Quantity	Unit	Unit Price	Total Cost
Mobilization	1	LS	\$ 10,500.00	\$ 10,500.00
Clearing and Grubbing	0	AC	\$ 2,000.00	\$ 720.00
Steel Cable Grate	2	EA	\$ 5,000.00	\$ 10,000.00
Tie-In to Existing Pavement	1	LS	\$ 1,500.00	\$ 1,500.00
10" Conc Pvmt	1750	SY	\$ 80.00	\$ 140,000.00
12" Lime Subgrade	1900	SY	\$ 8.00	\$ 15,200.00
24-inch RCP	170	LF	\$ 100.00	\$ 17,000.00
SET (TXDOT)	4	EA	\$ 2,000.00	\$ 8,000.00
4" Pvmt Markings	500	LF	\$ 5.00	\$ 2,500.00
Allowance for Electrical Drop	1	LS	\$ 12,000.00	\$ 12,000.00
Allowance for Electrical Meter	1	LS	\$ 3,000.00	\$ 3,000.00
Allowance for Electrical Conduit	1	LS	\$ 4,000.00	\$ 4,000.00
Erosion/Sediment Control	2	EA	\$ 350.00	\$ 700.00
SWPPP Inspection and Maintenance	1	LS	\$ 2,000.00	\$ 2,000.00
Inlet Protection Barrier	4	EA	\$ 100.00	\$ 400.00
Reinforced Filter Fabric Fence	100	LF	\$ 5.00	\$ 500.00
Sodding	85	SY	\$ 5.00	\$ 425.00
Traffic Control	1	LS	\$ 8,000.00	\$ 8,000.00
Project Contingencies (15%)				\$ 35,466.75
Construction Total				\$ 271,911.75

Comments/Special Project Notes:

The proposed area is located in TxDOT ROW and will require concurrence from TxDOT to perform the work.

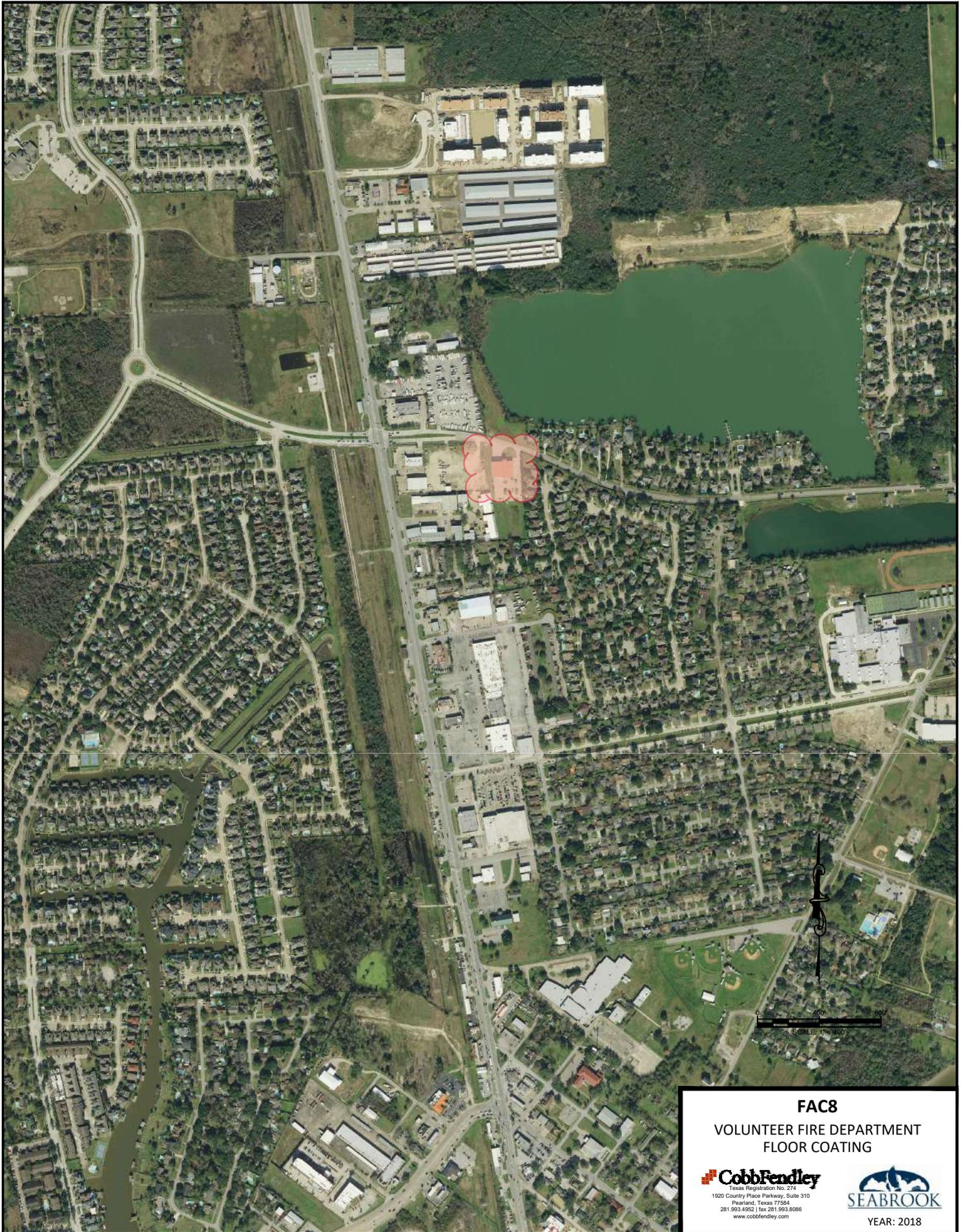


FAC7
PUBLIC SAFETY INSPECTION AREA
(SH 146)

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YEAR: 2018



FAC8

VOLUNTEER FIRE DEPARTMENT
FLOOR COATING

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YEAR: 2018



FAC9
CITY HALL COUNCIL CHAMBERS/COURT
CHAMBERS SECURITY REMODEL

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**SEABROOK**

YEAR: 2018



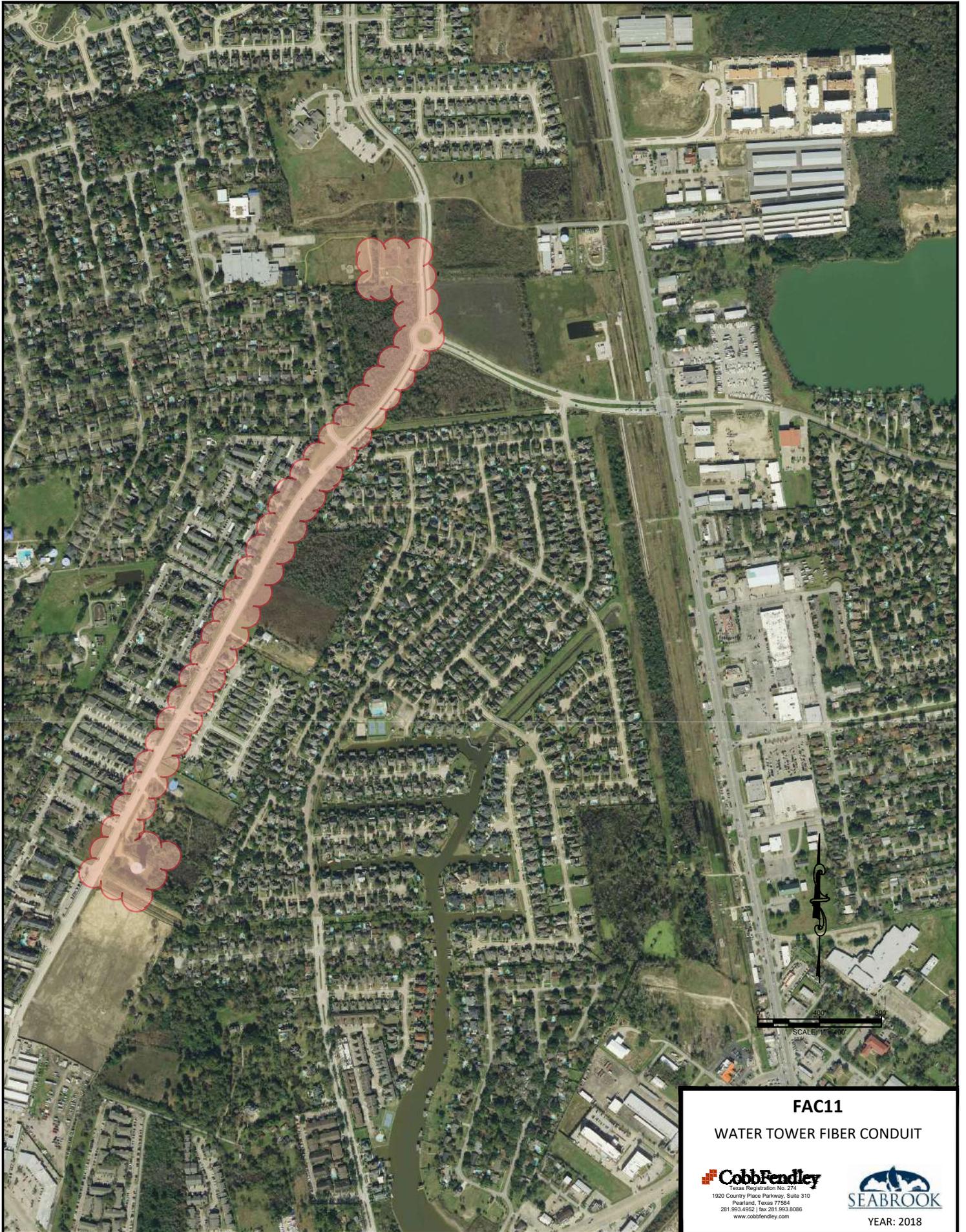
FAC10

WATER WELLS FIBER CONDUIT

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FAC11

WATER TOWER FIBER CONDUIT

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YEAR: 2018

PROPOSED PARK PROJECTS
FY19 – FY23+

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: PINE GULLY HIKE AND BIKE TRAIL

Project Location/Limits: OLD HIGHWAY 146 TO PARK DRIVE

CIP Number: P1

Facility Type: PARK

Project Description and Justification

This project consists of approximately 4,500 linear feet of decomposed granite and two bridge crossings over Pine Gully for a hike and bike trail.

Project Cost Estimates:

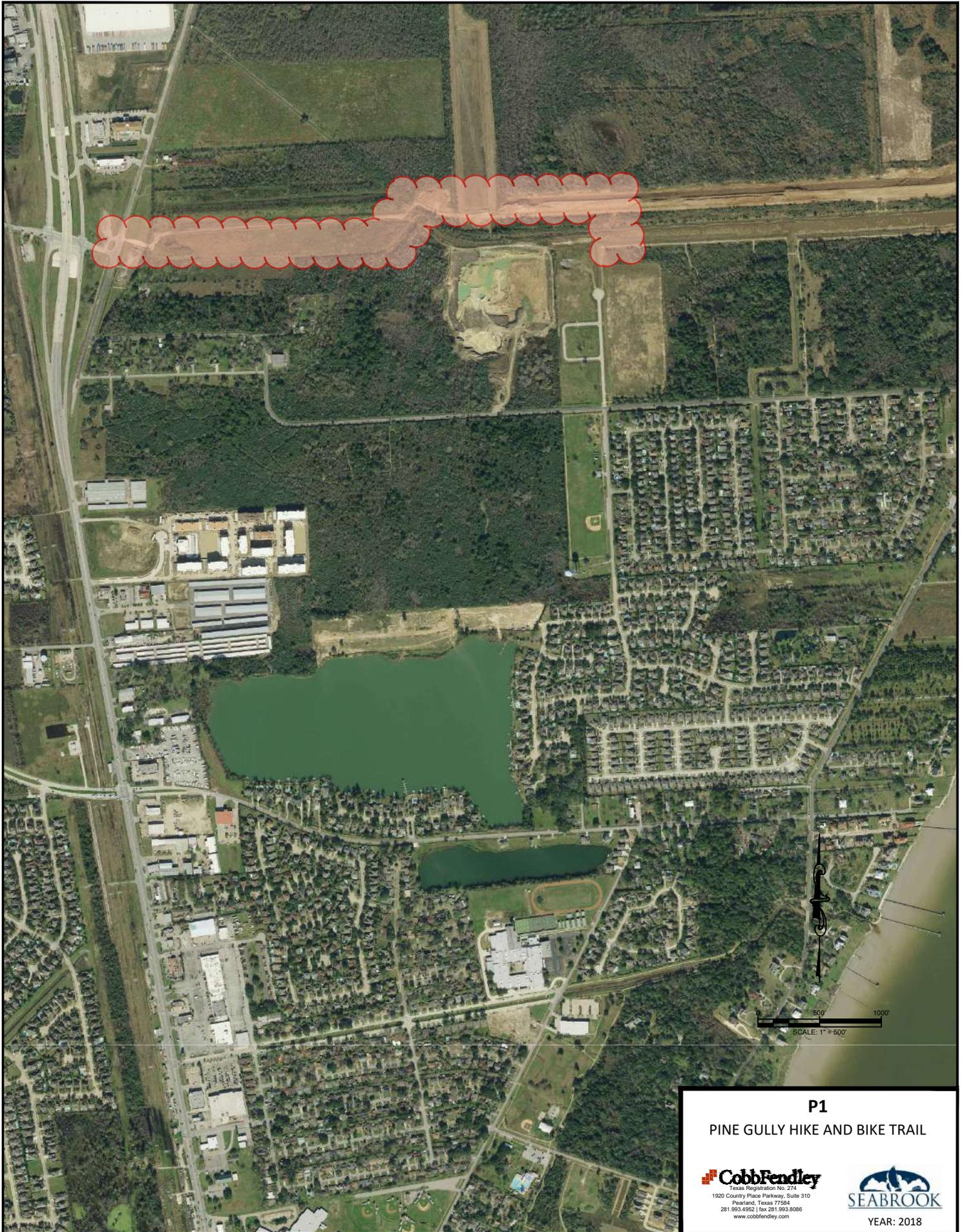
COST BY FISCAL YEAR							
Project Cost	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
Environmental				\$ 10,000			\$ 10,000
Engineering/Planning							\$ -
Land/Easements Acq.				\$ 50,000			\$ 50,000
Construction					\$ 749,400		\$ 749,400
Total Cost				\$ 60,000	\$ 749,400		\$ 809,400
FUNDING SOURCES BY FISCAL YEAR							
Funding Source	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant				\$ 60,000	\$ 749,400		\$ 809,400
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ 60,000	\$ 749,400	\$ -	\$ 809,400

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Mobilization	1	LS	\$ 50,000.00	\$ 50,000.00
Decomposed Granite (4' Wide, 6" Thick)	450	TON	\$ 80.00	\$ 36,000.00
Class 200 Filter Fabric	4500	LF	\$ 3.00	\$ 13,500.00
Crushed Concrete	150	TON	\$ 40.00	\$ 6,000.00
Drainage Pipe	100	LF	\$ 30.00	\$ 3,000.00
150 Ft Truss Walking Bridge - 150'X7'	2	EA	\$ 225,000.00	\$ 450,000.00
Bridge Installation	2	LS	\$ 30,000.00	\$ 60,000.00
Rest Area Benches	1	LS	\$ 3,000.00	\$ 3,000.00
Educational Signage	1	LS	\$ 3,000.00	\$ 3,000.00
Project Contingencies (20%)				\$ 124,900.00
Construction Total				\$ 749,400.00

Comments/Special Project Notes:

City staff will self perform trail construction. Design & Construction of walk bridge would be outside of City staff scope.



0 500' 1000'
SCALE: 1" = 500'

P1
PINE GULLY HIKE AND BIKE TRAIL

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: E MEYER HIKE AND BIKE TRAIL
Project Location/Limits: OLD HIGHWAY 146 TO PARK DRIVE
CIP Number: P2
Facility Type: PARK

Project Description and Justification

Project Cost Estimates:

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Environmental							\$ -
Engineering/Planning						\$ 58,234	\$ 58,234
Land/Easements Acq.							\$ -
Construction						\$ 323,520	\$ 323,520
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 381,754	\$ 381,754

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)						\$ 381,753.60	\$ 381,754
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 381,754	\$ 381,754

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Mobilization	1	LS	\$ 90,000.00	\$ 90,000.00
Decomposed Granite (4' Wide, 6" Thick)	560	TON	\$ 80.00	\$ 44,800.00
Class 200 Filter Fabric	5600	LF	\$ 3.00	\$ 16,800.00
Ditch Cleaning and Reshaping	5600	LF	\$ 20.00	\$ 112,000.00
Rest Area Benches	1	LS	\$ 3,000.00	\$ 3,000.00
Educational Signage	1	LS	\$ 3,000.00	\$ 3,000.00
Project Contingencies (20%)				\$ 53,920.00
Construction Total				\$ 323,520.00

Comments/Special Project Notes:

The existing roadside drainage is assumed to range from 24" to 36" deep and is in a v-shape. Typical roadside swales are at 0.10% slope.



500' 1000'
SCALE: 1" = 500'

P2

E. MEYER HIKE AND BIKE TRAIL

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: MAIN STREET PINDO PALMS
Project Location/Limits: MAIN STREET
CIP Number: P3
Facility Type: PARK

Project Description and Justification

COST BY FISCAL YEAR

Project Cost	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
Environmental							\$ -
Engineering/Planning							\$ -
Land/Easements Acq.							\$ -
Construction		\$ 15,000					\$ 15,000
Total Cost	\$ -	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ 15,000

FUNDING SOURCES BY FISCAL YEAR

Funding Source	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
General Fund -Cash		\$ 15,000					\$ 15,000
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP							\$ -
Other: ___ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ 15,000

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Pindo Palm	1	LS	\$ 15,000.00	\$ 15,000.00
				\$ -
				\$ -
				\$ -
				\$ -
Project Contingencies (20%)				\$ -
Construction Total				\$ 15,000.00

Comments/Special Project Notes:

The existing roadside drainage is assumed to range from 24" to 36" deep and is in a v-shape. Typical roadside swales are at 0.10% slope.



0 500' 1000'
SCALE: 1" = 500'

P3

MAIN STREET PINDO PALMS

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: BAYBROOK TENNIS & BASKETBALL COURTS RESURFACING
Project Location/Limits: BAYBROOK PARK
CIP Number: P4
Facility Type: PARK

Project Description and Justification

COST BY FISCAL YEAR

Project Cost	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
Environmental							\$ -
Land/Easements Acq.							\$ -
Engineering/Planning							\$ -
Construction	\$ -	\$ 50,000					\$ 50,000
Total Cost	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000

FUNDING SOURCES BY FISCAL YEAR

Funding Source	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 Gen CIP		\$ 50,000					
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Basketball Courts	1	LS	\$ 50,000.00	\$ 50,000.00
				\$ -
				\$ -
				\$ -
				\$ -
Construction Total				\$ 50,000.00

Comments/Special Project Notes:



0 500' 1000'
SCALE: 1" = 500'

P4

**BAYBROOK TENNIS & BASKETBALL
COURTS RESURFACING**

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: ROBINSON PARK PARKING LOT INCREASES

Project Location/Limits: ROBINSON PARK

CIP Number: P5

Facility Type: PARK

Project Description and Justification

This project is to increase the size of the existing parking lot at Robinson Park.

COST BY FISCAL YEAR

Project Cost	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
Environmental							\$ -
Land/Easements Acq.							\$ -
Engineering/Planning		\$ -					\$ -
Construction		\$ 18,000	\$ -				\$ 18,000
Total Cost	\$ -	\$ 18,000	\$ -	\$ -	\$ -	\$ -	\$ 18,000

FUNDING SOURCES BY FISCAL YEAR

Funding Source	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
Fund 28 General		\$ 18,000					
Other: ____ (PARK IMPROV FUND)							\$ -
Total Funding	\$ -	\$ 18,000	\$ -	\$ -	\$ -	\$ -	\$ 18,000

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Parking Lot	1	LS	\$ 18,000.00	\$ 18,000.00
Construction Total				\$ 18,000.00

Comments/Special Project Notes:



P5
ROBINSON PARK
PARKING LOT INCREASES

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SEABROOK
YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: WILDWOOD PLAYGROUND EQUIPMENT REPLACEMENT
Project Location/Limits: WILDWOOD PLAYGROUND
CIP Number: P6
Facility Type: PARK

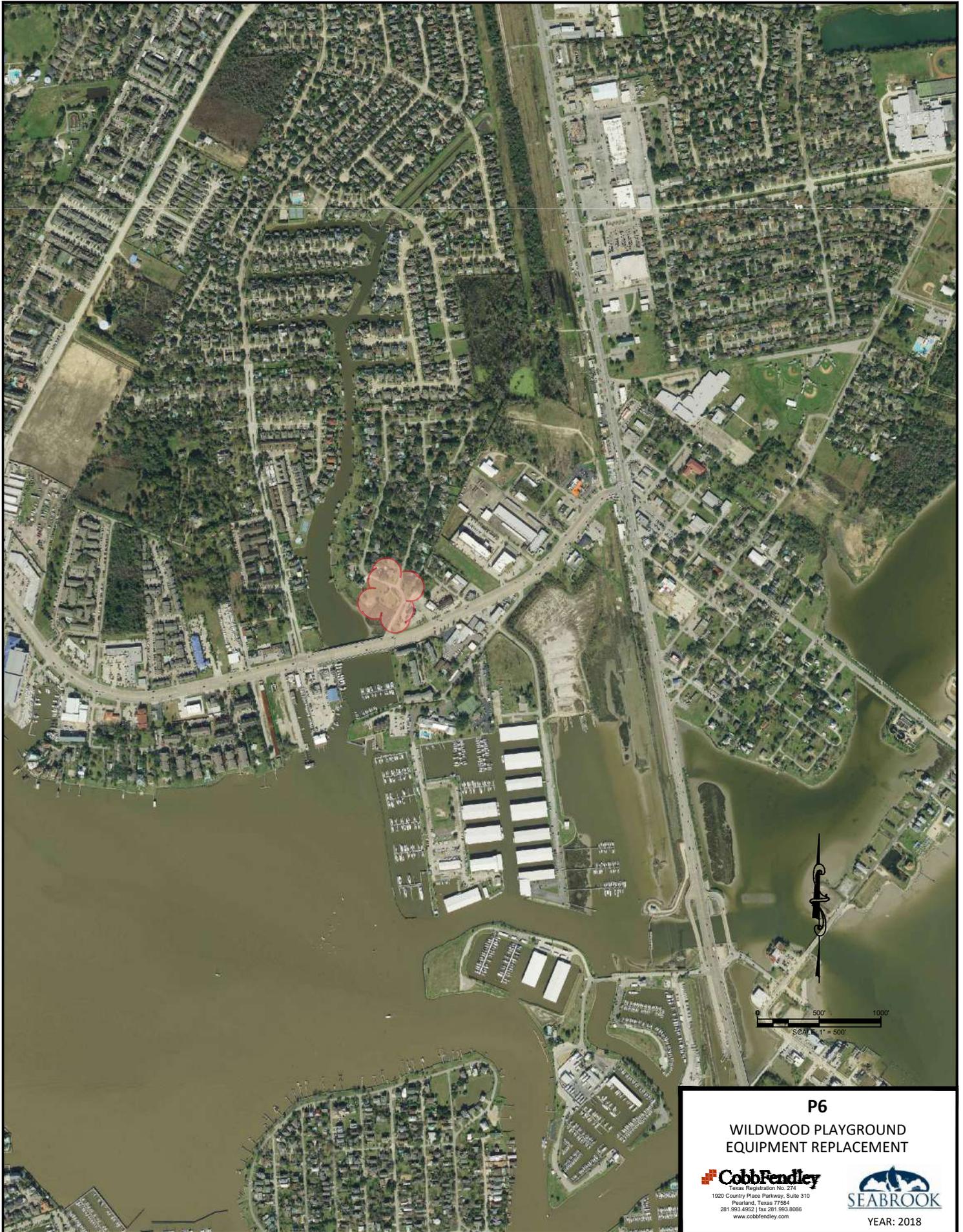
Project Description and Justification

This project is to replace the existing playground equipment at Wildwood Playground.

COST BY FISCAL YEAR							
Project Cost	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
Environmental							\$ -
Land/Easements Acq.							\$ -
Engineering/Planning							\$ -
Construction			\$ 40,000				\$ 40,000
Total Cost	\$ -	\$ -	\$ 40,000	\$ -	\$ -	\$ -	\$ 40,000
FUNDING SOURCES BY FISCAL YEAR							
Funding Source	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
TBD			\$ 40,000				
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ 40,000	\$ -	\$ -	\$ -	\$ 40,000

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
Playground Equipment	1	LS	\$ 40,000.00	\$ 40,000.00
				\$ -
				\$ -
				\$ -
				\$ -
Construction Total				\$ 40,000.00

Comments/Special Project Notes:



P6

**WILDWOOD PLAYGROUND
EQUIPMENT REPLACEMENT**

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: MEADOR PARK TRAIL LIGHTS
Project Location/Limits: MEADOR PARK
CIP Number: P7
Facility Type: PARK

Project Description and Justification

This project is to add lighting to Meador Park Trail.

COST BY FISCAL YEAR

Project Cost	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
Environmental							\$ -
Land/Easements Acq.							\$ -
Engineering/Planning							\$ -
Construction				\$ 45,000			\$ 45,000
Total Cost	\$ -	\$ -	\$ -	\$ 45,000	\$ -	\$ -	\$ 45,000

FUNDING SOURCES BY FISCAL YEAR

Funding Source	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
TBD				\$ 45,000			
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ 45,000	\$ -	\$ -	\$ 45,000

Opinion of Probable Construction Cost Estimate

Description	Quantity	Unit	Unit Price	Total Cost
Trail Lighting	1	LS	\$ 45,000.00	\$ 45,000.00
				\$ -
				\$ -
				\$ -
				\$ -
Construction Total				\$ 45,000.00

Comments/Special Project Notes:

Meador Trail is approximately 1,600 LF.



0 500' 1000'
SCALE: 1" = 500'

P7
MEADOR PARK TRAIL LIGHTS

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YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: BAYSIDE KAYAK LAUNCH
Project Location/Limits: BAYSIDE PARK
CIP Number: P8
Facility Type: PARK

Project Description and Justification

This project is to add a kayak boat launch to Bayside Park.

Project Cost	Prior Funding	COST BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
Environmental							\$ -
Land/Easements Acq.							\$ -
Engineering/Planning							\$ -
Construction					\$ 20,000		\$ 20,000
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ 20,000	\$ -	\$ 20,000

Funding Source	Prior Funding	FUNDING SOURCES BY FISCAL YEAR					TOTAL
		FY19	FY20	FY21	FY22	FY23+	
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
TBD					\$ 20,000		
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ 20,000	\$ -	\$ 20,000

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
Kayak Launch	1	LS	\$ 20,000.00	\$ 20,000.00
				\$ -
				\$ -
				\$ -
				\$ -
Construction Total				\$ 20,000.00

Comments/Special Project Notes:



0 500' 1000'
SCALE: 1" = 500'

P8
BAYSIDE KAYAK LAUNCH

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SEABROOK
YEAR: 2018

PROPOSED CAPITAL IMPROVEMENT PROJECTS

Project Title: RED BLUFF/TAYLOR LAKE KAYAK LAUNCH
Project Location/Limits: TAYLOR LAKE AT RED BLUFF
CIP Number: P9
Facility Type: PARK

Project Description and Justification

This project is to add a kayak boat launch to Taylor Lake at Red Bluff.

COST BY FISCAL YEAR							
Project Cost	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
Environmental							\$ -
Land/Easements Acq.							\$ -
Engineering/Planning							\$ -
Construction						\$ 50,000	\$ 50,000
Total Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ 50,000

FUNDING SOURCES BY FISCAL YEAR							
Funding Source	Prior Funding	FY19	FY20	FY21	FY22	FY23+	TOTAL
General Fund -Cash							\$ -
Certificates of Obligation							\$ -
Prior Certificates of Obligation							\$ -
General Obligation Bonds							\$ -
Prior Bonds							\$ -
Future Bonds							\$ -
SEDC 4B Funds							\$ -
Water/Sewer Revenue Bonds							\$ -
Enterprise Utility Fund - Cash							\$ -
Impact Fees							\$ -
Developer Contribution							\$ -
Potential Grant							\$ -
TBD						\$ 50,000	
Other: ____ (Fund/Agency)							\$ -
Total Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ 50,000

Opinion of Probable Construction Cost Estimate				
Description	Quantity	Unit	Unit Price	Total Cost
Kayak Launch	1	LS	\$ 50,000.00	\$ 50,000.00
				\$ -
				\$ -
				\$ -
				\$ -
Construction Total				\$ 50,000.00

Comments/Special Project Notes:



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**RED BLUFF/TAYLOR LAKE
KAYAK LAUNCH**

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