



City of Tampa

Jane Castor, Mayor

Transportation and Stormwater
Services Department
Stormwater Engineering Division
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Tampa, Florida 33602

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January 6, 2020

TO: The Honorable Luis Viera, Chairman, and Members of Tampa City Council
THROUGH: John Bennett, Chief of Staff *JB*
THROUGH: Brad Baird, P.E., Administrator, Public Works and Utility Services *BIB*
FROM: Jean W. Duncan, P.E., Director, Transportation and Stormwater Services *Jean W. Duncan*
MOTION: **File No. E2016-8 CH 21**
Council amends the motion adopted on July 27, 2017 to request Jean Duncan, Director of the Transportation and Stormwater Services, to provide a written quarterly report, instead of an appearance, regarding the Stormwater Project/Program. (Next written quarterly report to be provided on January 23, 2020.)

The Transportation and Stormwater Services Department respectfully submits our Stormwater Projects /Program Update #13 for the first quarter of FY 2020. The report details the program in the following order:

Section A 1-5 (Pages 2 -11): Stormwater Major Capital Improvement Projects Program
Section A 6 (Pages 12-56): Stormwater Miscellaneous Capital Improvement Projects Program
Section B (Pages 57-58): Stormwater Capital Improvement Bond Program Report
Section C (Pages 59-63): Stormwater Service Assessment Program

Thank you for your continued support of the City of Tampa Stormwater Program. Please let us know if you require additional information.

JWD/jmg

Enclosures: Stormwater Update Report #13
cc: Martin Shelby, City Council Attorney
Shirley Foxx-Knowles, City Clerk
File



Stormwater Projects / Program Report

Tampa City Council Update

No. 13 - January 23, 2020

A) Major Capital Improvements

Projects 1-5 are regional multi-year flooding relief projects for the City of Tampa. Each project fact sheet includes a description, location map, and timeline status. Each of these projects is in various stages of development and will continue for a number of years, due to the complexity and comprehensive nature of the project. Project 6 incorporates the Miscellaneous Neighborhood Projects that typically have a six (6) month or less construction timeline and each have their own fact sheet.

Project List CIP = \$251,285,000

1. Upper Peninsula Flooding Relief
2. North Tampa Closed Basin Flooding
3. Cypress Street Outfall Extension
4. Southeast Seminole Heights Flooding Relief
5. Lower Peninsula Flooding Relief
6. Miscellaneous Capital Improvements

B) Stormwater Capital Improvement Bond Program Report

C) Stormwater Service Assessment Program \$14,000,000

1. Upper Peninsula Flooding Relief

City Project #: 1001017

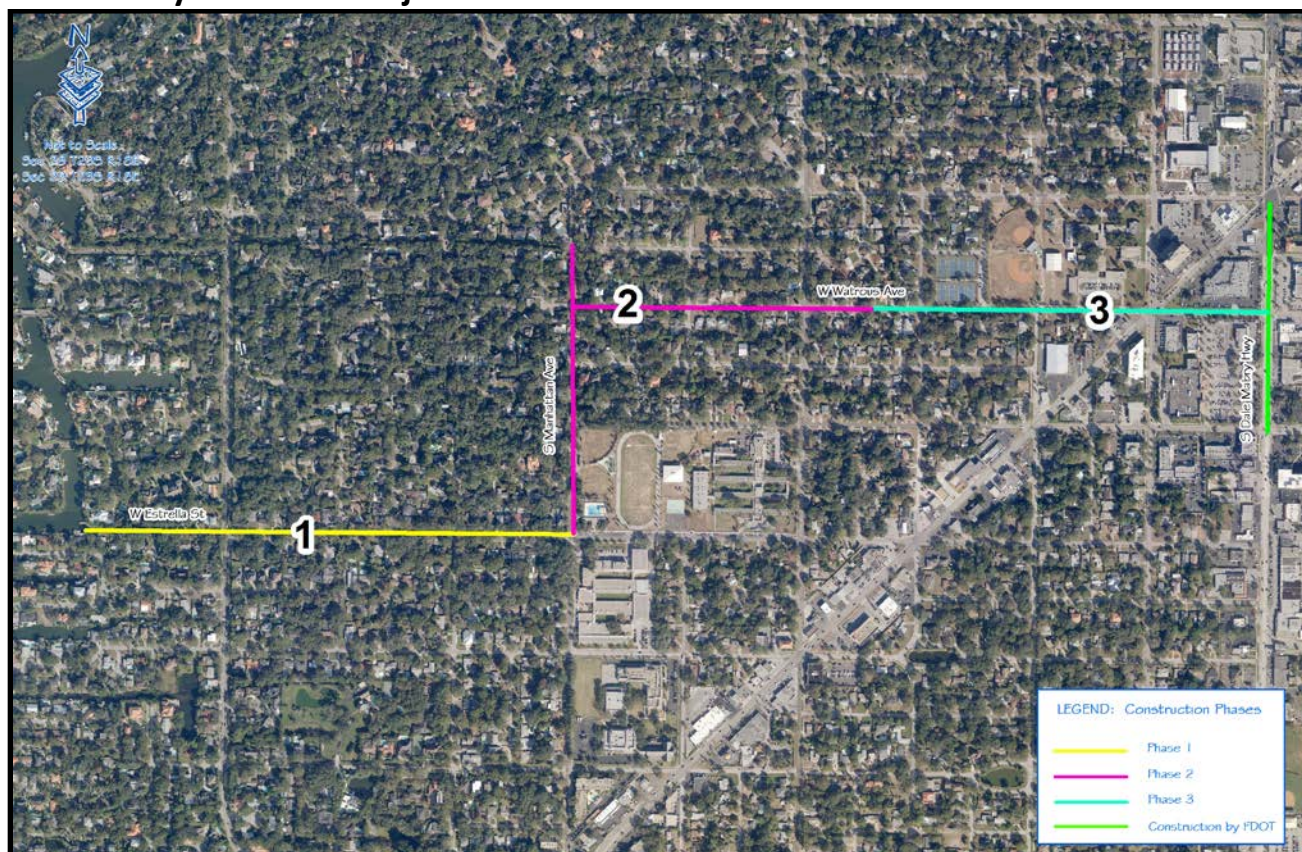
Upper Peninsula Regional Stormwater Improvements is a multi-year flooding relief project covering approximately 3400 acres of South Tampa from Kennedy Boulevard southward to Euclid Avenue. Stormwater Engineering Division has developed a stormwater model and comprehensive study of the project area, with the goal of providing incremental improvements to the stormwater infrastructure. The main benefit of the project is to provide targeted relief in flood prone areas to address public safety.

This project will alleviate the severe chronic flooding along Dale Mabry Highway between Henderson Blvd and Neptune Street. The highway is part of the primary evacuation route for South Tampa. Existing pipes will be connected to the trunkline thereby providing basin wide flooding relief.

Dale Mabry Trunkline project consists of the construction of a box culvert from Dale Mabry/Henderson/Neptune to a new outfall at Estrella Street. The system will also interconnect to improvements along the Watrous Canal, thus providing two outfalls for flooding relief.

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Dale Mabry Trunkline Project Phases



Summary of Project Costs:

Phase	Firm	Amount	Funding Source	Schedule	
				Start	Finish
Design/Build	Kimmins	\$37M	COT/SWFWMD	FY17	FY20

Timeline:

- Construction started June 25, 2018, and the projected completion is January 2021.
- 50% reimbursement by SWFWMD is occurring concurrently with construction.



2. North Tampa Closed Basins Flooding Relief

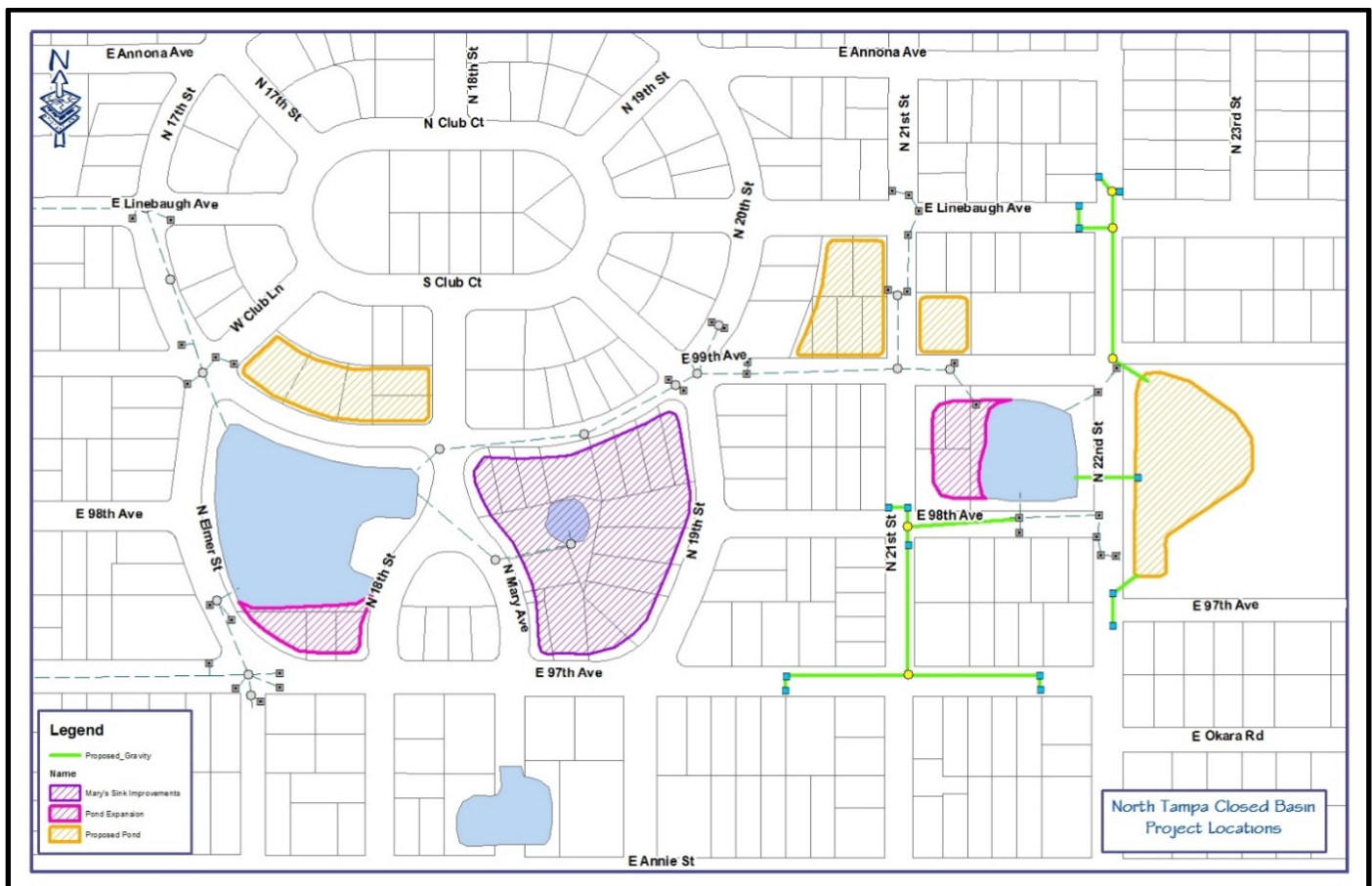
City Project #: 0000403

Project Description:

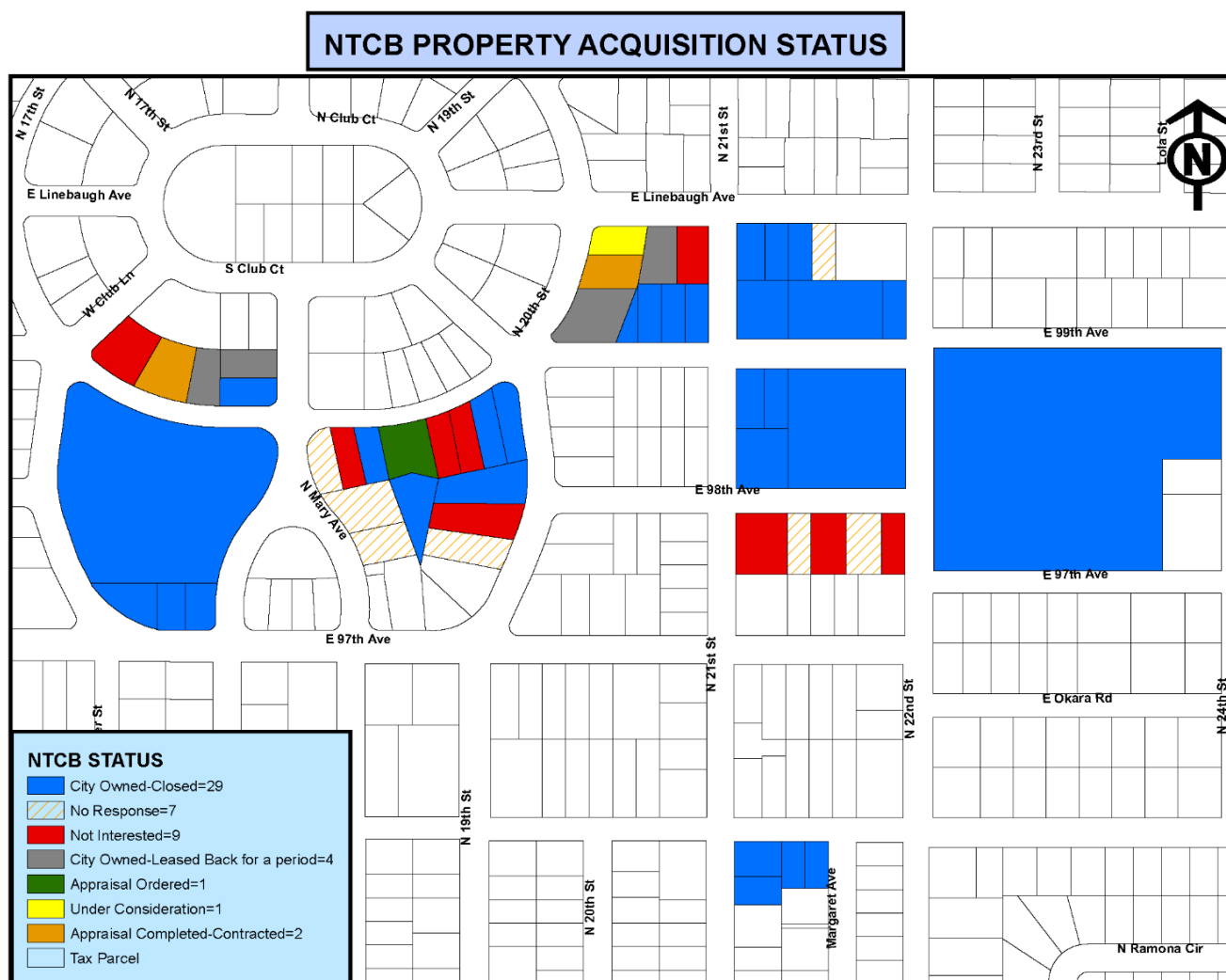
Portions of the northern part of the City of Tampa flood periodically due to their location within closed drainage basins and the absence of drainage infrastructure to provide relief. The North Tampa Closed Basins (NTCB) study area is generally bounded by Fowler Avenue on the north, 30th Street on the east, Busch Boulevard on the south and Florida Avenue on the west and includes several individual closed basins that comprise a portion of the springshed for Sulphur Springs, which is located on the north bank of the Hillsborough River just west of Nebraska Avenue. These areas rely primarily on discharge to groundwater through sinkholes, whose receiving capacity has been observed to be unreliable due to sedimentation/clogging, high groundwater levels or possible collapse of subsurface conveyances.

Based on a model and study of the closed basin area, properties are targeted for acquisition and will serve as future stormwater ponds. The project consists of property acquisition in the area experiencing the most severe flooding. Approximately 50 properties have been identified.

Project Map:



Property Acquisition Map:



Summary of Project Costs:

Phase	Firm	Amount	Funding Source	Schedule	
				Start	Finish
Property Acquisition	In-House	\$1M/ Year	COT	FY16	FY20
Construction	In-House/bid	\$2M	COT	FY19	FY21

Timeline:

- The City of Tampa Real Estate Division is in the process of acquiring the properties as identified by Transportation and Stormwater Services Department's North Tampa Closed Basin Study. Please see the property acquisition map above.
- The Real Estate Division is currently working with multiple potential sellers.
- Property acquisition to be complete in FY20.
- The construction of David E. West pond and piping system started in September 2019.



3. Cypress Street Outfall Extension

City Project #: 1001018

Project Description:

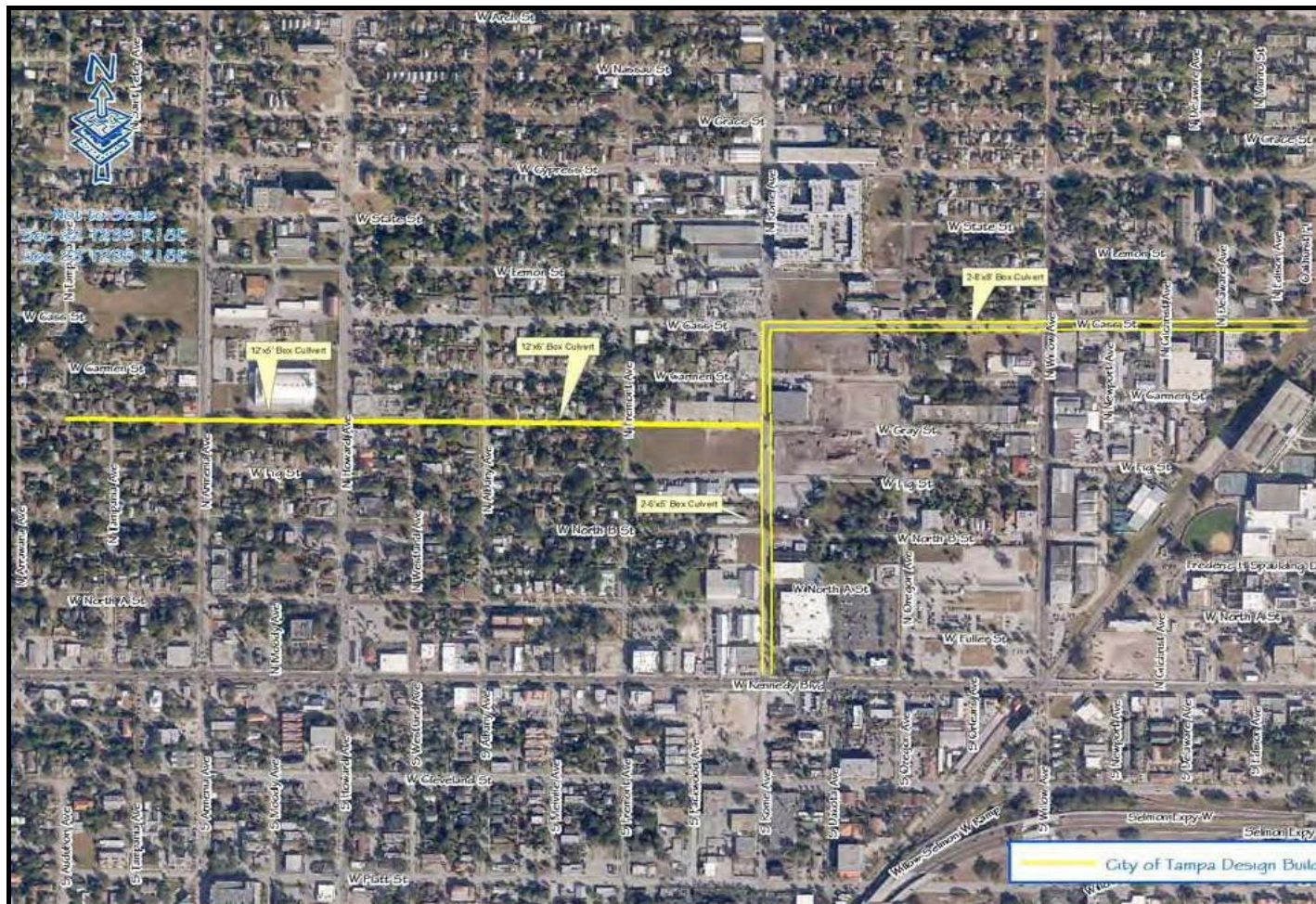
The drainage basin is generally bounded by Cypress Street on the north, Habana Avenue on the west, Hyde Park Avenue on the east and Swann Avenue on the south. The total basin area is approximately 550 acres and outfalls to the Hillsborough Bay. Several areas within the northern portion of the basin (north of Kennedy Boulevard) have experienced numerous incidences of flooding, which has led to flood damage claims.

The project consists of the construction of a dual box culvert from the existing stub at Cass and North Boulevard to Rome Avenue. Another box culvert will connect at Cass and Rome Avenue and run south towards Kennedy Boulevard. The last leg will connect at Rome and West Gray Street and extend west to North Tampania Avenue. This project is the second phase of the Cypress Street Outfall Flooding Relief Project that will be Design/Build procurement in coordination with the Water Department.

Location Map:



Cypress Street Outfall:



Summary of Project Costs:

Phase	Firm	Amount	Funding Source	Schedule	
				Start	Finish
Design/Build	Woodruff & Sons	\$32 M	COT/SWFWMMD	FY17	FY20

Timeline:

- Design and Permitting is 100% completed.
- The SWFWMD Board approved the GMP in April 2019.
- The city council approved the GMP in June 2019.
- The construction is underway.



4. Southeast Seminole Heights Flooding Relief

City Project #: 1000773

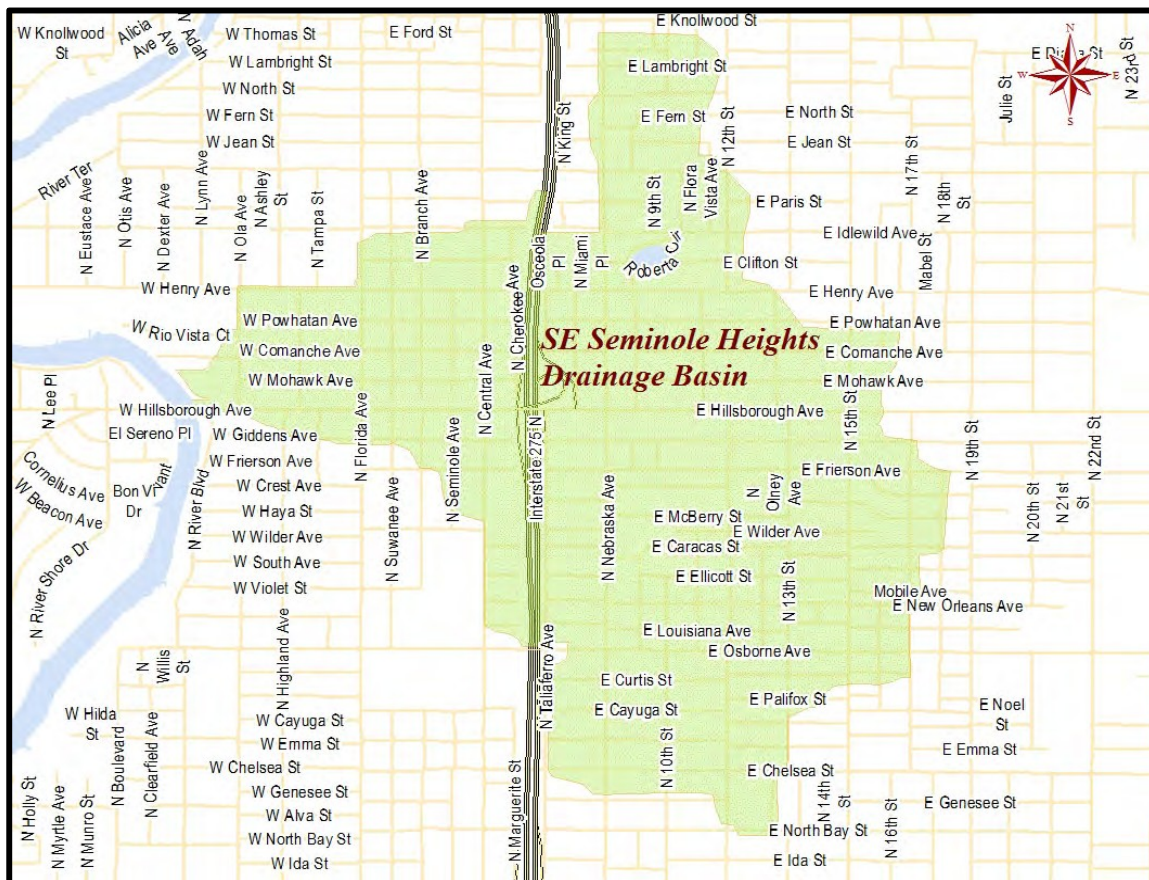
Project Description:

The Southeast Seminole Heights Drainage Basin encompasses 779 acres of urban area that discharges into the Hillsborough River south of the dam. The basin area extends northerly from East Chelsea Street east of I-275 freeway to East Diana Street and easterly to North 18th Street. To the west of I-275, the basin narrows and extends from Giddens Avenue to East North Street. The Basin is part of a historic Tampa neighborhood that had its beginnings in the early 1900's.

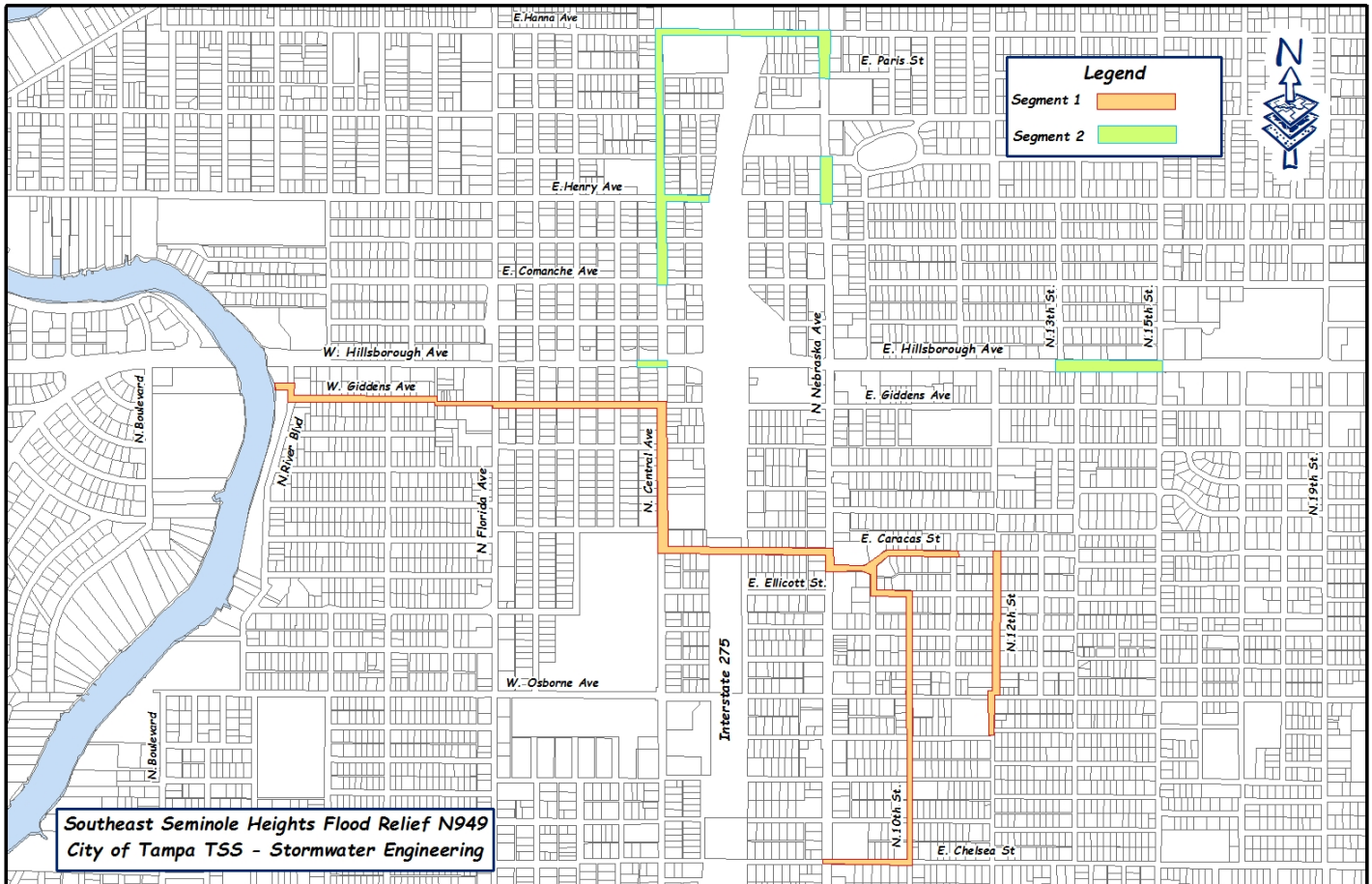
Southeast Seminole Heights Basin has numerous flooding locations, failing and undersized conveyance systems throughout the basin. A recent drainage study identified several potential stormwater improvement projects to alleviate flooding.

A feasibility study will be performed to assess the potential drainage improvement projects as recommended in the previous drainage study. Individual improvement projects will subsequently be designed and constructed throughout the basin areas to improve drainage conditions.

Location Map:



Southeast Seminole Heights:



Summary of Project Costs:

Phase	Firm	Amount	Funding Source	Schedule	
				Start	Finish
Planning Study	LWES	\$90K	COT	FY16	FY16
Feasibility Study	FDC	\$45K	COT	FY17	FY18
Design & Construction	Nelson/Wade Trim	\$35M	COT/SWFWMD	FY19	FY23

Timeline:

- The Planning and Feasibility studies have been completed.
- Preliminary design is underway.
- The target date for presenting the GMP for Construction to City Council is July 2020.
- The target date for the start of construction is September 2020.



5. Lower Peninsula Flooding Relief

City Project #: 1000178

Project Description:

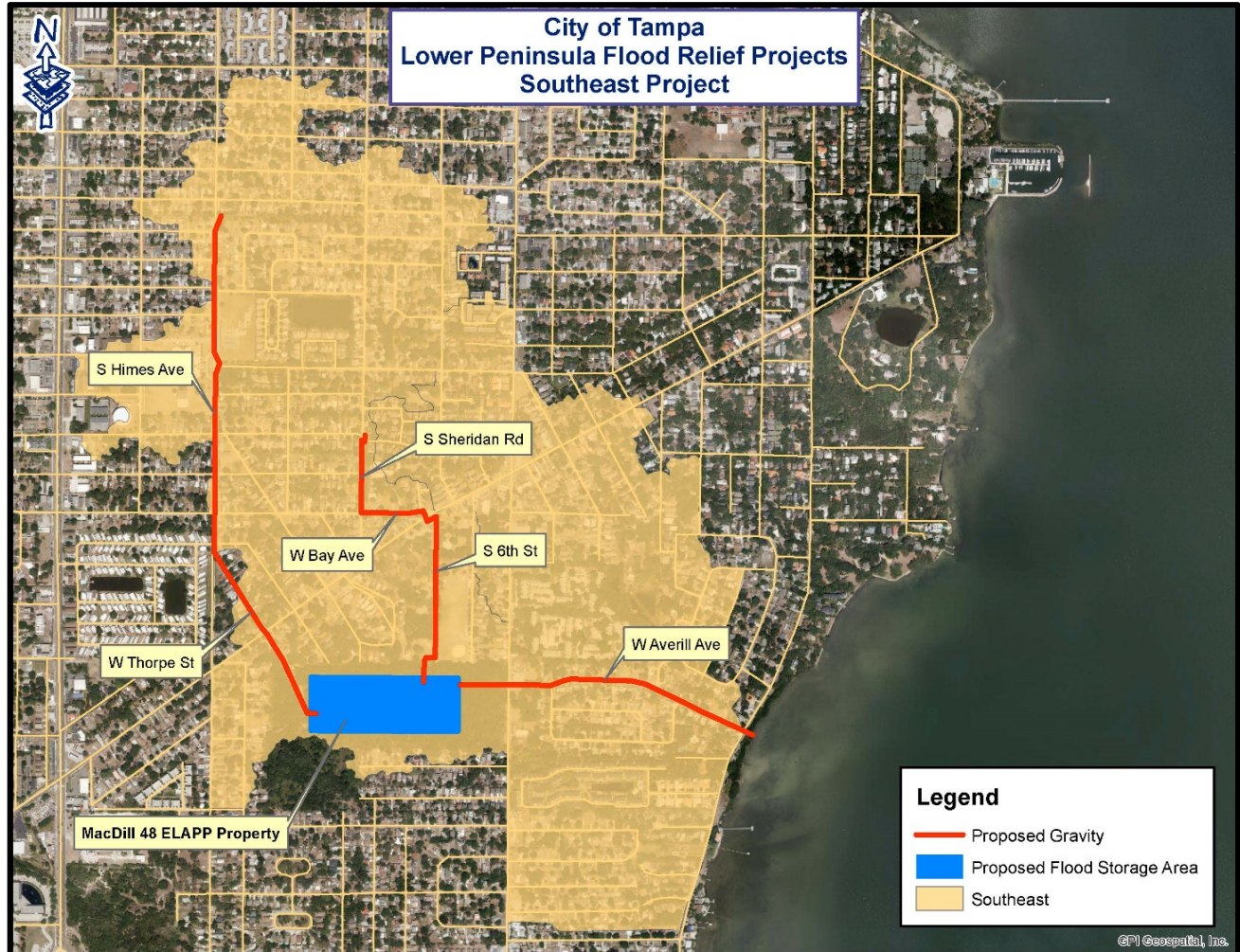
A regional watershed model is needed to provide a baseline for capital project improvement planning and design. The area has numerous flooding locations, failing and undersized conveyance systems throughout the 6,000 acre watershed.

The purpose of the project is to develop a baseline for capital improvement planning and design that provides conceptual solutions to frequent flooding associated with undersized stormwater pipes and relic ditch systems in the region. It is the City's desire to pursue cooperative funding from the South West Florida Water Management District (SWFWMD) for these improvements; therefore, the watershed study must meet SWFWMD's requirements for funding.

Location Map:



Southeast Segment:



Summary of Project Costs:

Phase	Firm	Amount	Funding Source	Schedule	
				Start	Finish
Planning Study	Applied Sciences	\$650K	COT/SWFWMD	FY16	FY18
Southeast Segment Design	Atkins	\$4M	COT/SWFWMD	FY20	FY20
Southeast Segment Construction	Kimmins	\$21M	COT/SWFWMD	FY21	FY23

Timeline:

- The existing and proposed condition models have been completed.
- The design/build team of Kimmins/Atkins has been selected. Scope and Fee negotiation is underway.
- The Southeast Segment Design will occur in FY20.
- The Southeast Segment Construction will begin in FY21 and finish in FY23.



6. Miscellaneous Capital Improvement **Project Status**

Tampa City Council Update No. 13 - January, 2020

Construction timelines are typically six (6) months or less for neighborhood projects. For additional project descriptions, please see the project fact sheets following this project status report.

PROJECT STATUS KEY	
	Design
	Design Complete and In Construction Queue
	Under construction
	Construction Complete

CAPITAL IMPROVEMENT PROJECTS	DISTRICT	ESTIMATE
Projects Assigned to Construction Contracts		
1. Knights between Lynwood and MacDill	4	\$200,000
2. Virginia Park PH III, Lois from Bay to Bay to Palmira	4	\$500,000
3. Virginia Park PH III, Clark from Bay to Bay to Palmira	4	\$325,000

Projects Bid through CAD		
4. 2nd Street from Interbay to Bay	4	\$200,00
5. Wyoming Flooding Relief PH II	4	\$325,00
6. FY19/FY20 Annual CIPP Rehabilitation	Citywide	\$1,200,000
7. David E. West Park Pond Enhancements	7	\$1,000,000
8. 43rd Street Outfall Regional Drainage Improvements, PH III	5	\$7,200,000
9. Forest Hills Park Improvements	7	\$880,000
10. Rogers Park Drainage Improvements	5	\$500,000
11. Poinsettia Pumping Station Rehabilitation	7	\$1,400,000
12. Eastridge Pumping Station Rehabilitation	7	\$700,000
13. Copeland Park Pumping Station	7	\$800,000
14. Anita Subdivision Drainage Improvements PH II	4	\$1,300,000
15. 56th Street and Broadway Avenue Flooding Relief	5	\$2,000,000
16. Hamilton Creek Water Quality Improvement	6	\$500,000
17. Lamb Canal Rehabilitation	4	\$1,500,000
18. Ditch Rehabilitation Program	Citywide	\$1,000,000
19. Lantana/Poinsettia Pumping Station	7	\$625,000
20. El Portal & Newport Pumping Station	6	\$350,000
21. Lake Roberta Sediment Trap Upgrade	5	\$400,000

CAPITAL IMPROVEMENT PROJECTS	DISTRICT	ESTIMATE
Projects Bid through CAD – continued		
22. Newport, Willow, Orleans and Watrous Groundwater Diversion	4	\$900,000
23. Beach Park Flooding Relief	6	\$750,000
24. Manhattan: Vasconia to Bay To Bay Flooding Relief	4	\$3,000,000

Projects Assigned to Transportation & Stormwater Services Department In-House Crews		
25. Idell Street Roadway Improvements PH II	5	\$75,000
26. Concordia Pond	4	\$125,000
27. Seneca Pumping Station Site Improvements	7	\$100,000
28. Gomez Alley between Kennedy & North A Street	4	\$75,000
29. Gomez Alley Ph 2 (Reprofiling)	4	\$75,000
30. Binnicker at 4th Street	4	\$50,000
31. Neptune/Treasure Drainage Improvement	6	\$75,000
32. 3911 Swann Avenue	6	\$50,000
33. Rambla Flooding Relief	7	\$100,000
34. W. Jetton Avenue from Armenia to Moody	4	\$125,000
35. Hale Ave. at Cleveland St. Flooding Relief	6	\$100,000
36. North St. & 17th St. Flooding Relief	5	\$75,000
37. Ballast Point Blvd and MacDill Ave	4	\$125,000
38. Chelsea Street at 44th Flooding Relief	5	\$90,000
39. Everina Street from Carrington to Coachman	4	\$200,000
40. Okara and 26th St. Force Main	7	\$90,000
41. Bougainvillea Pond Outfall	7	\$75,000
42. Fire Station 20 Drainage Improvements	7	\$50,000
43. 21 st & Annie Pond	7	\$90,000

Knights between Lynwood and MacDill

Flooding Relief FY2017, District 4

Estimated cost: \$200K

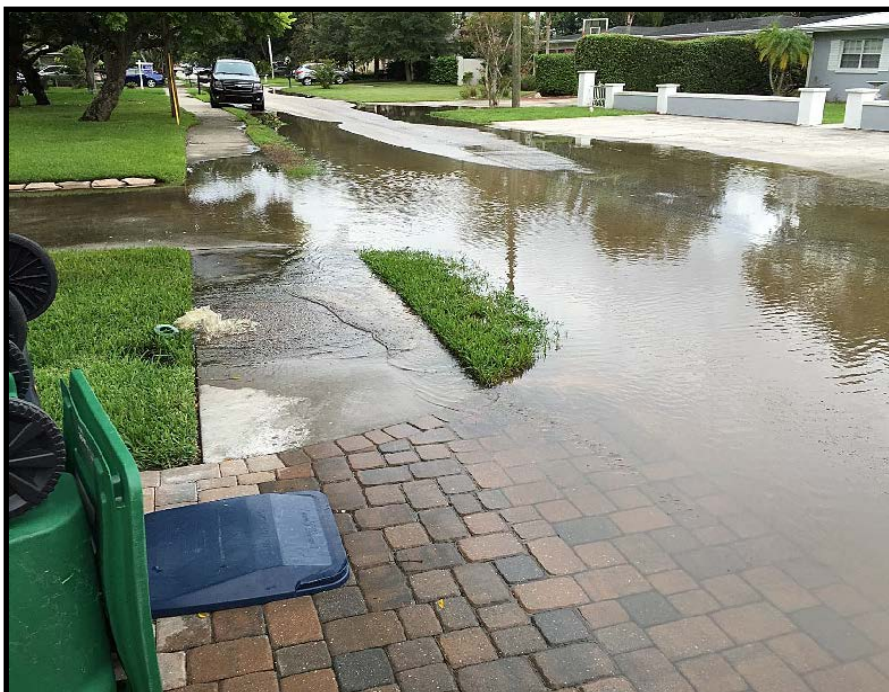
Project Description:

Install a stormwater collection system to drain the street.

Justification:

Pavement grading and new development have affected the conveyance of runoff to the existing stormwater system.

Project Photos



Virginia Park PH III, Lois from Bay To Bay to Palmira

Flooding Relief FY2017, District 4

Estimated cost: \$500K

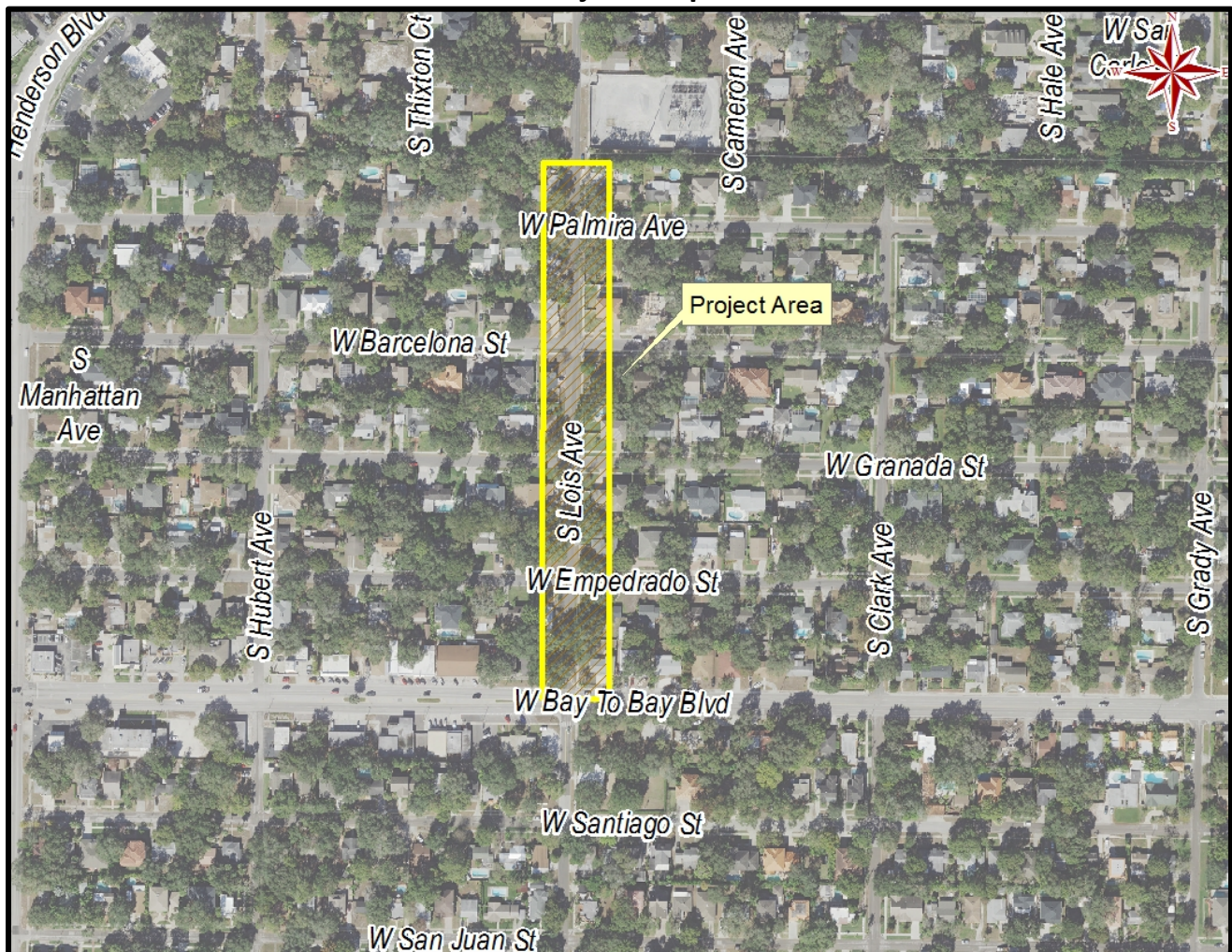
Project Description:

The project consists of regrading of the roadway to improve drainage.

Justification:

Localized flooding occurs at intersections along South Lois Avenue. The proposed project will alleviate the flooding.

Project Map



Virginia Park PH III, Clark from Bay To Bay to Palmira

Flooding Relief FY2017, District 4

Estimated cost: \$325K

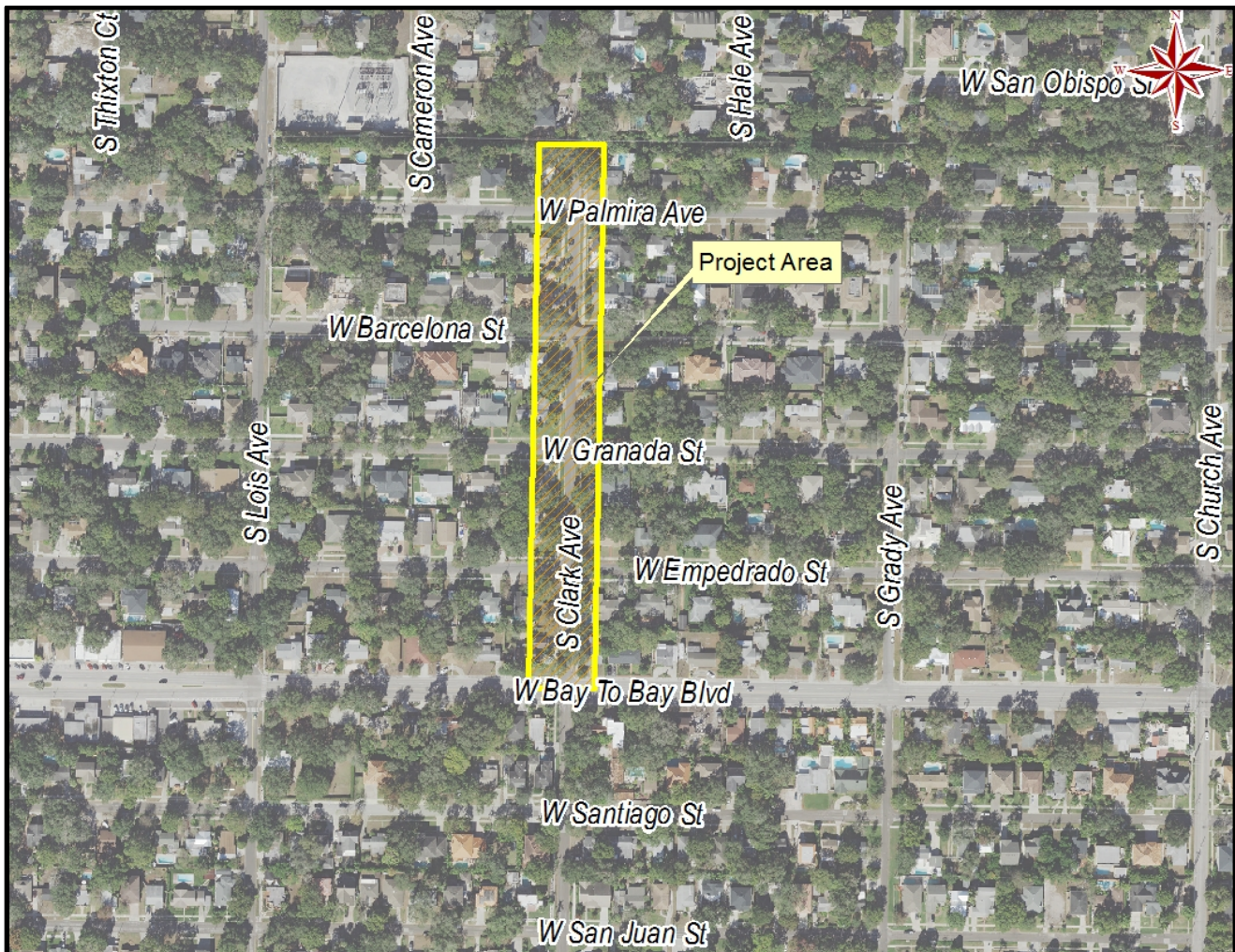
Project Description:

The project consists of regrading of the roadway to improve drainage.

Justification:

Localized flooding occurs at intersections along South Clark Avenue. The proposed project will alleviate the flooding.

Project Map



2nd Street from Interbay to Bay

Flooding Relief FY2017, District 4

Estimated cost: \$200K

Project Description:

New drainage system to be proposed along 2nd Street to connect to box culvert along West Bay Avenue.

Justification:

Severe Street flooding along South 2nd Street from Interbay Boulevard to West Bay Avenue.

Related Issues:

S. 2nd Street dead ends before West Bay Avenue. Easement may be required to connect to existing box culvert along West Bay Avenue.

Project Map & Photo



Wyoming Flooding Relief PH II

Flooding Relief FY2017, District 4

Estimated cost: \$325K

Project Description:

This project will upgrade the drainage system on 2nd Street and provide a connection to box culvert at 3rd Street.

Justification:

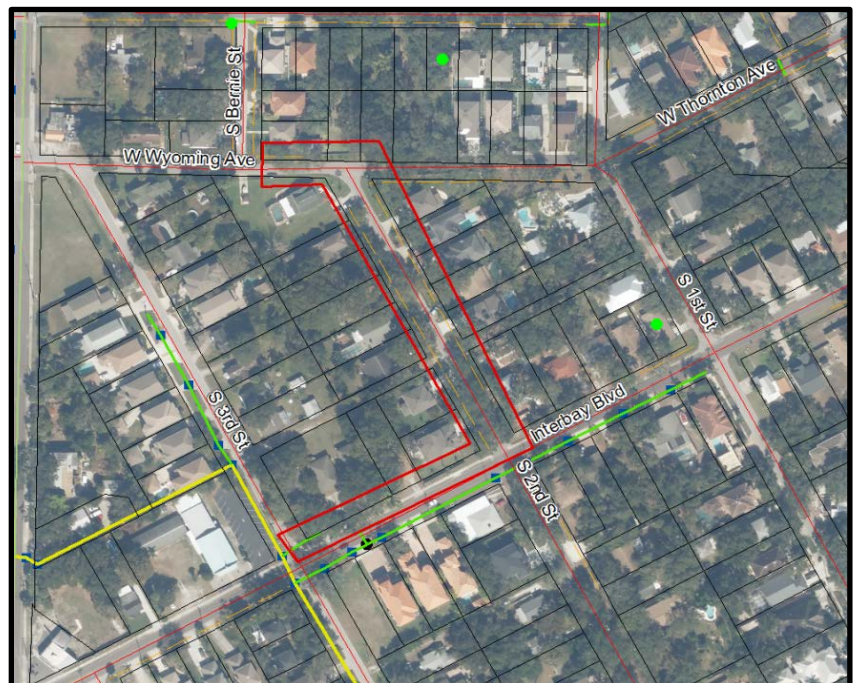
Development in the vicinity of Wyoming/Bernie Avenue utilizes a system of drainage ditches to convey runoff to Interbay Boulevard. The ditch system has been compromised by discontinuous driveway culverts and lack of system on Interbay Boulevard.

Related Issues:

This project is a continuation of Wyoming/Trilby Phase I.



Project Map and Photos



FY19/FY20 Annual CIPP Rehabilitation

Citywide

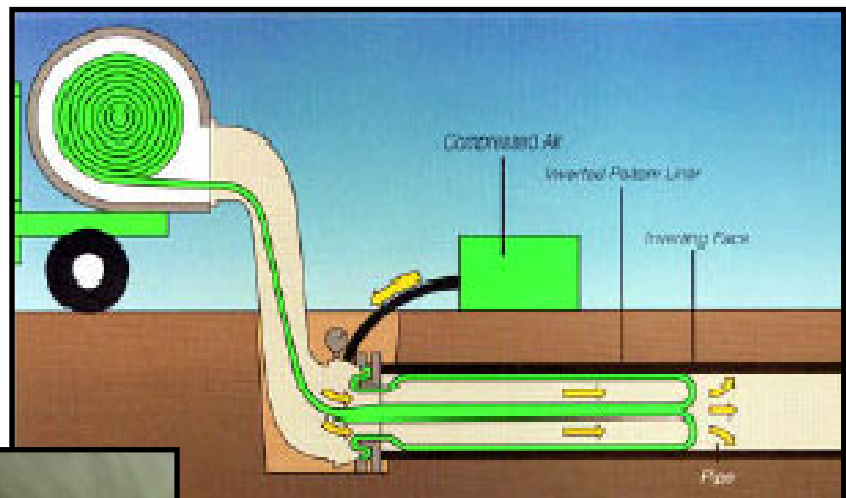
FY19 Estimated cost: \$600K; FY20 Estimated cost: \$600K

Project Description:

The scope of work includes labor, materials, and equipment to rehabilitate gravity stormwater pipes from 12-inch to 48-inch diameter by installation of cured-in-place pipe liner.

Justification:

The project provides rehabilitation of deteriorated stormwater pipe systems.



Project Photos



David E. West Park Pond Enhancements

Water Quality Improvement/Flooding Relief FY2017, District 7

Estimated cost: \$1M

Project Description:

The project consists of the construction of a stormwater pond, pipes, and inlets on City lands. The pond will be hydraulically equalized with an existing stormwater pond, thus providing additional back-up volume to relieve downstream flooding.

Justification:

Attenuation storage is needed in this area because it is a closed basin with limited receiving capacity in the receiving sink. Multiple flooding complaints have been received.

Project Map



43rd Street Outfall PH III

Regional Drainage Improvement - FY2017, District 5

Estimated cost: \$7.2M

Project Description:

The project consists of the construction of a 48-inch RCP pipe from the Phase 2 regional stormwater pond to the 43rd Street Outfall just upstream of McKay Bay. Additionally, a culvert upgrade will be constructed at the terminus of the 43rd Street ditch to reduce flooding on adjacent properties.

Justification:

The project provides a new secondary outfall to convey runoff from the Phase 2 regional pond to the 43rd Street Outfall. Phase 3 improvements provide additional flood relief for properties and roadways that are severely impacted.

Project Map



Forest Hills Park Improvements

FY2017, District 7

Estimated cost of Stormwater Share: \$880K

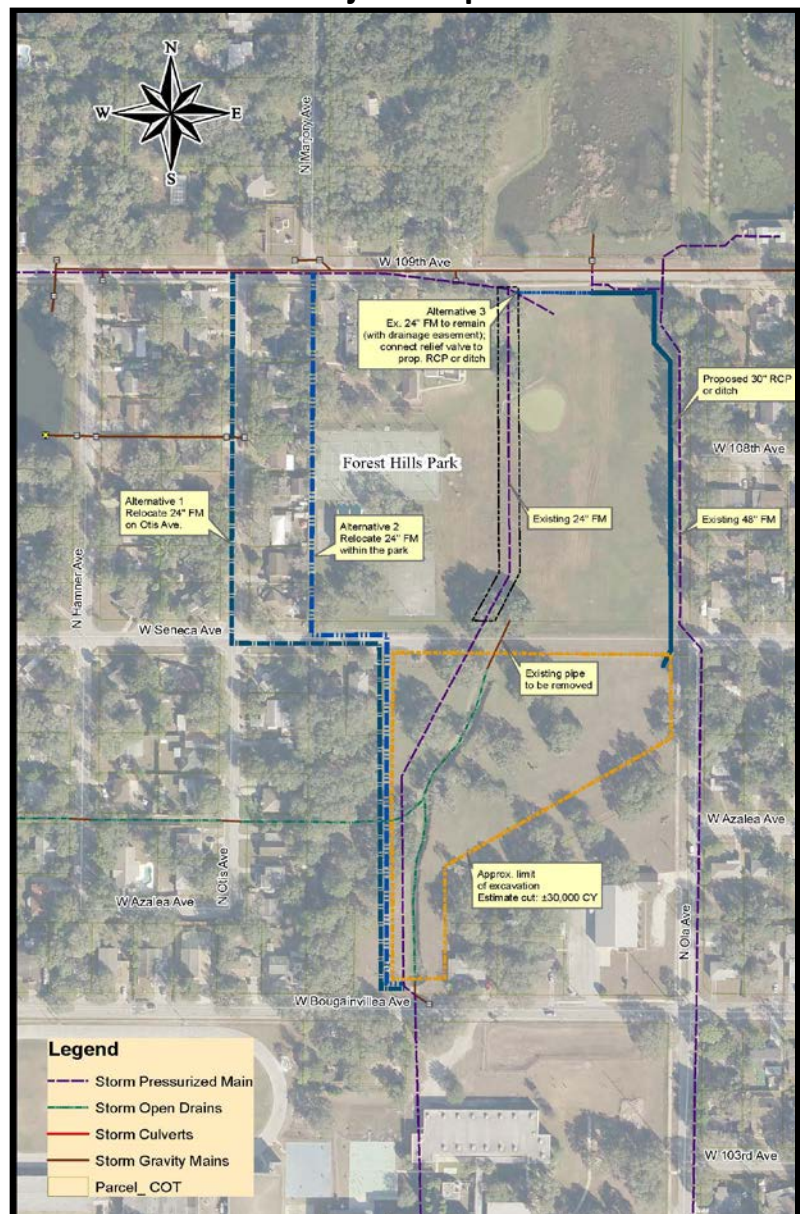
Project Description:

The scope of this project is to design a pond on the southern portion of the property and a stormwater collection system for the field area which will convey runoff to the pond. The pond will require a pumped outfall. The basin analysis shall include the outfall rate for future design of a pumping station by others. Topographic survey will be needed to evaluate what elevation the field can be raised to without impacting abutting properties and to evaluate the disposition of the tennis courts. Surface improvements may include new tennis courts or other recreational facilities and additional parking. The Parks and Recreation Department is co-funding this design with Stormwater Engineering as Stormwater will be a co-funding participant for the construction project. Stormwater has also identified the need to construct a piping system on the south side of 109th Avenue, to convey emergency bypass flow, and to continue the piping system along the east side of the property to collect and convey runoff from 108th Avenue and Seneca Avenue.

Justification:

The Parks Department has an existing baseball field located in a low area that holds water during the rainy season causing it to be unusable. Parks would like to raise the low lying areas to provide for a dry playing field during the summer months. Stormwater is providing funding and assistance to relocate the low area.

Project Map



Rogers Park Drainage Improvements

Flooding Relief FY2018, District 5

Estimated cost: \$ 500K

Project Description:

The project consists of replacing/relocating the failed 24-inch pipe and construction of new inlets and new outfall to the river.

Justification:

Recent TV inspection has shown several areas of failed pipe, cave-ins, and root intrusions. Current pipe location is inaccessible due to railroad spur.

Related Issues:

Need to coordinate with the Water Department's reconstruction of the railroad spur.

Project Map



Poinsettia Pumping Station Rehabilitation

Flooding Relief FY2018, District 7

Estimated cost: \$1.4M

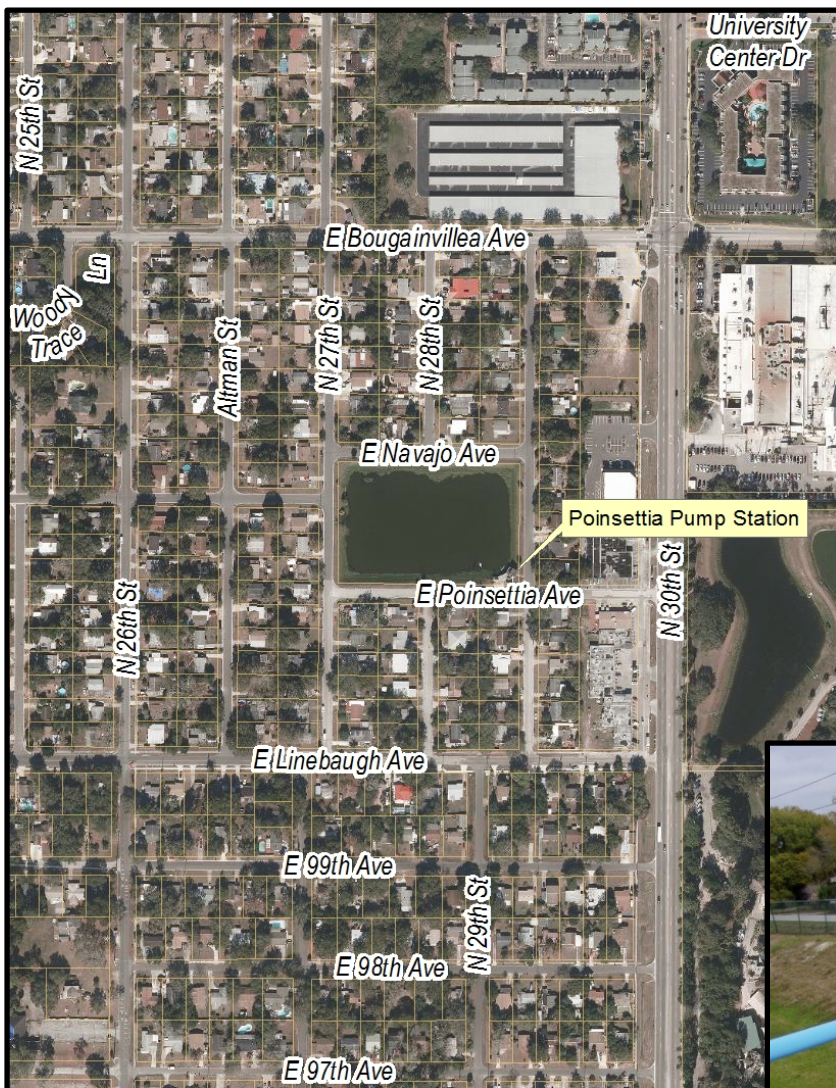
Project Description:

This project consists of removal of the failed hydraulically driven pumps and the installation of two new electric submersible pumps and motor controls. New pumps will match the existing flow and provide a more energy efficient system.

Justification:

The Poinsettia Pumping Station was equipped in 1988 with hydraulically driven pumps and augmented with additional pumping capacity in 2005 and 2010. When the Donut Pond Pumping Station was activated in 2015 upstream of this location, demand at this station was reduced.

Project Map & Photo



Eastridge Pumping Station Rehabilitation

Flooding Relief FY2018, District 7

Estimated cost: \$700K

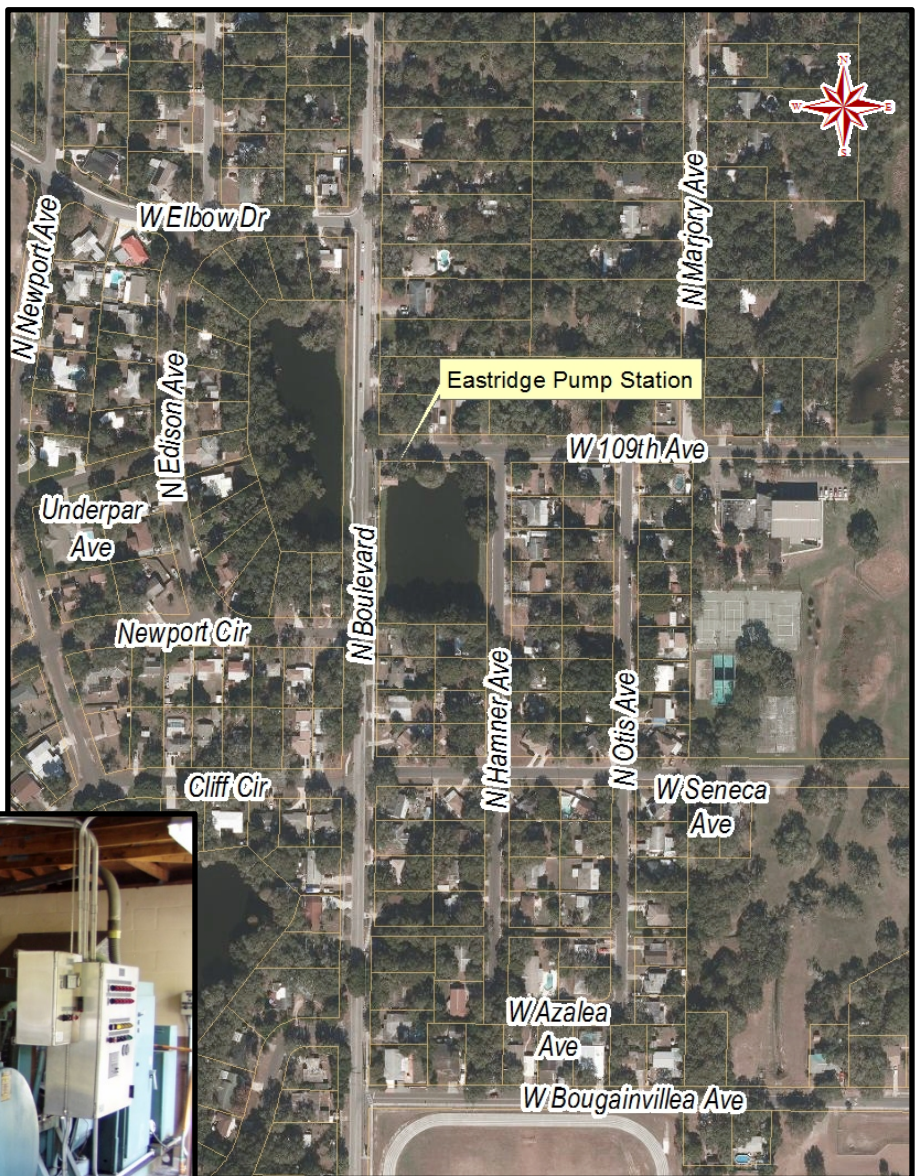
Project Description:

The project consists of removal of the hydraulically driven pump and installation of two electric submersible pumps and motor controls to provide redundancy.

Justification:

The Eastridge Pumping Station was constructed in 1983 with a single hydraulically driven pump. Repairs and maintenance has increased in the past five years.

Project Map and Photo



Copeland Park Pumping Station

Flooding Relief FY2018, District 7

Estimated cost: \$800K

Project Description:

The project consists of construction of a new pumping station and force main connecting to the existing drainage system on N 22nd Street at Colby Lane area.

Justification:

Currently a temporary pump is utilized to drain the low-lying area in Copeland Park. The proposed project will replace the temporary pump with a permanent pumping station and provide a more reliable system to better alleviate the flooding in the area.

Project Map and Photo



Anita Subdivision Drainage Improvements PH II

Flooding Relief FY2018, District 4

Estimated cost: \$1.3M

Project Description:

This neighborhood was developed with ditches draining to a collection system that discharged the stormwater to a system on Westshore Boulevard. Over the years the ditches have been filled and driveway culverts have been installed improperly. Consultant will evaluate the current drainage patterns and identify areas where ponding occurs. City crews will reestablish the relic ditches and correct the driveway culverts.

Justification:

The project reduces the flooding affecting residential properties and roadways.

Project Map



56th Street and Broadway Avenue Flooding Relief

Flooding Relief FY2019, District 5

Estimated cost: \$2M

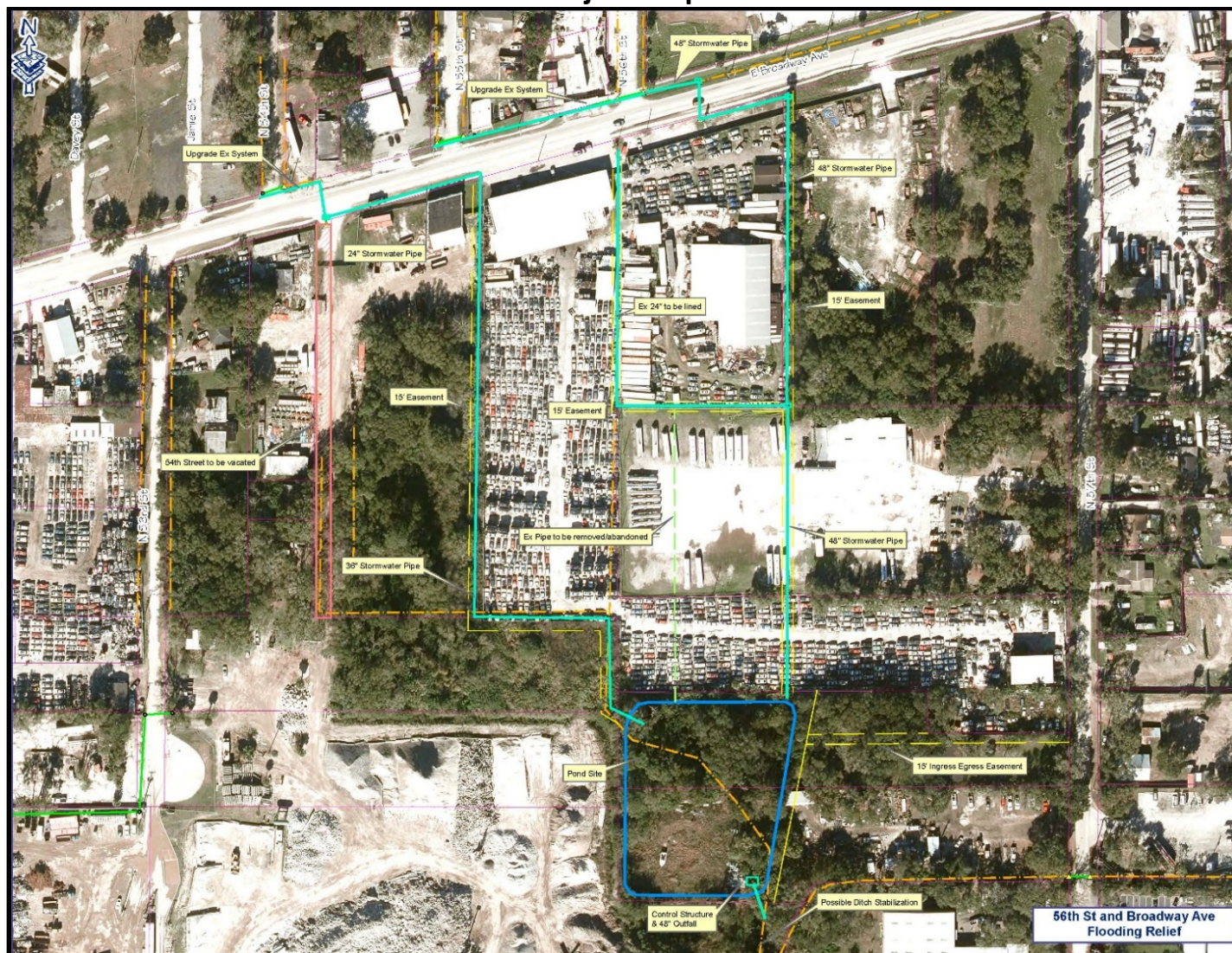
Project Description:

This section of Broadway Avenue experiences frequent flooding resulting from a combination of undersized piping systems and failing ditches. This project consists of property acquisition for a new stormwater pond that will provide water quality treatment and attenuation for the area, and the relocation, replacement and upsizing of pipes and ditches.

Justification:

This section of Broadway Avenue experiences frequent flooding resulting from a combination of undersized piping systems and failing ditches. The proposed project will improve drainage in the area.

Project Map



Hamilton Creek Water Quality Improvement

Water Quality Improvement FY2019, District 6

Estimated cost: \$500K

Project Description:

The scope of this project is to construct a five-pond stormwater treatment facility for Hamilton Creek, which outfalls to the Hillsborough River.

Justification:

The receiving section of the river has been listed by the Florida Department of Environmental Protection as impaired for fecal coliforms. This segment of the river was issued a Total Maximum Daily Load (TMDL) for nutrients and fecal coliforms and is currently under Basin Management Action Plan (BMAP) requirements for water quality improvements. The proposed project is part of the effort to improve the Hillsborough River water quality by reducing the amount of fecal coliform and nutrients discharged to the river. The Lowry Park Zoo supports this project and will be cooperative in implementing educational environmental programs on the project site to benefit the public.

Project Map



Lamb Canal Rehabilitation

Water Quality Improvement/Flooding Relief FY2019, District 4

Estimated cost: \$1.5M

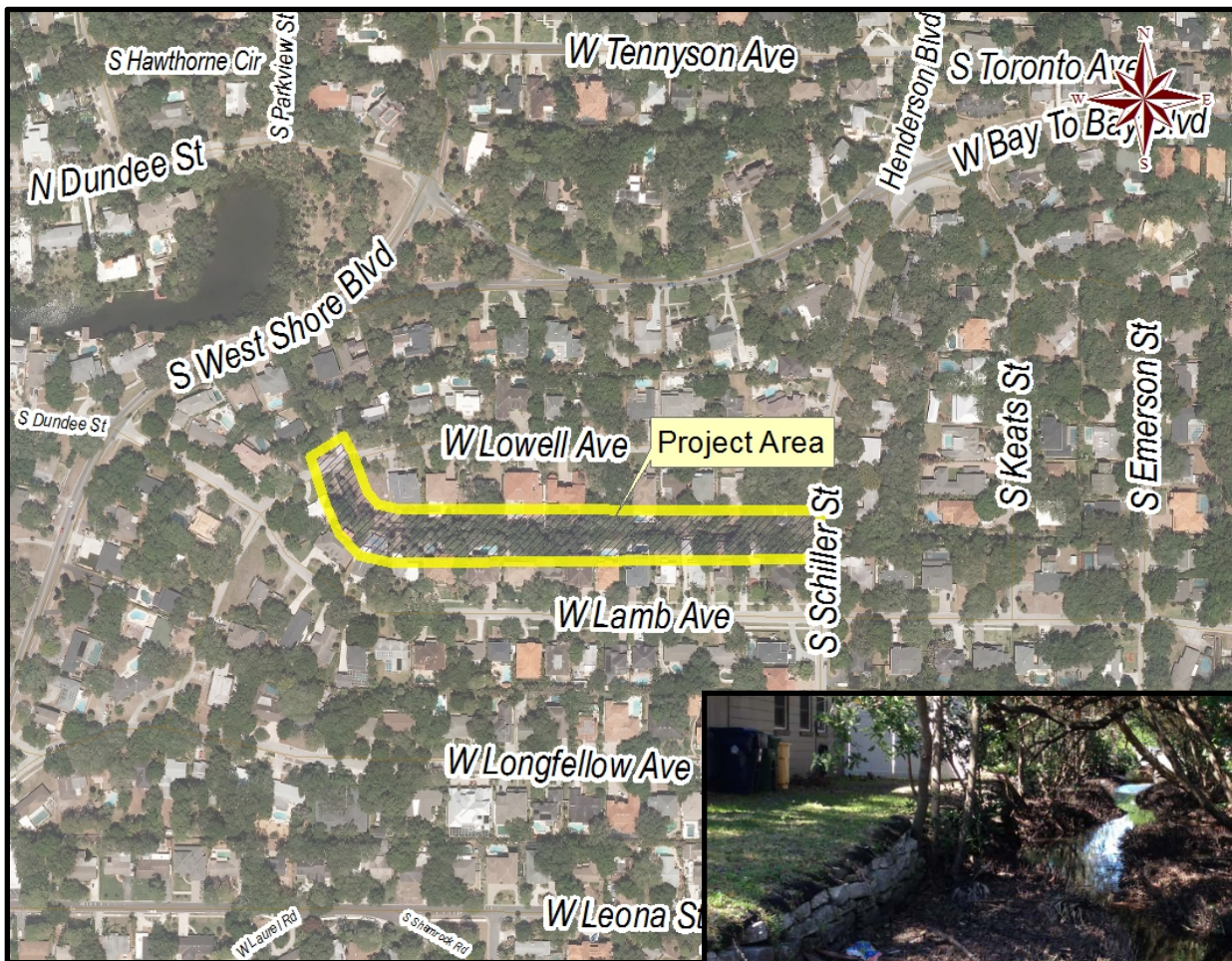
Project Description:

The project will include removal of sediments and reconstruction of the banks of the canal to restore the canal capacity and protect properties from erosion.

Justification:

Lamb canal from South Schiller Street to West Lowell Avenue section has been eroded over the years and in need of rehabilitation. The capacity of the canal is significantly reduced due to embankment deterioration.

Project Map and Photo



Ditch Rehabilitation Program

Water Quality Improvement/Flooding Relief FY2019, Citywide

Estimated cost: \$1M

Project Description:

This project creates an annual contract to address ditch improvements and associated upgrades to improve conveyance capacity and embankment stabilization.

Justification:

Rehabilitation is needed for ditches that have diminished capacity due to embankment erosion that cannot be corrected by maintenance.



Project photos

Lantana / Poinsettia Flooding Relief

Flooding Relief FY2020, District 7

Estimated cost: \$625k

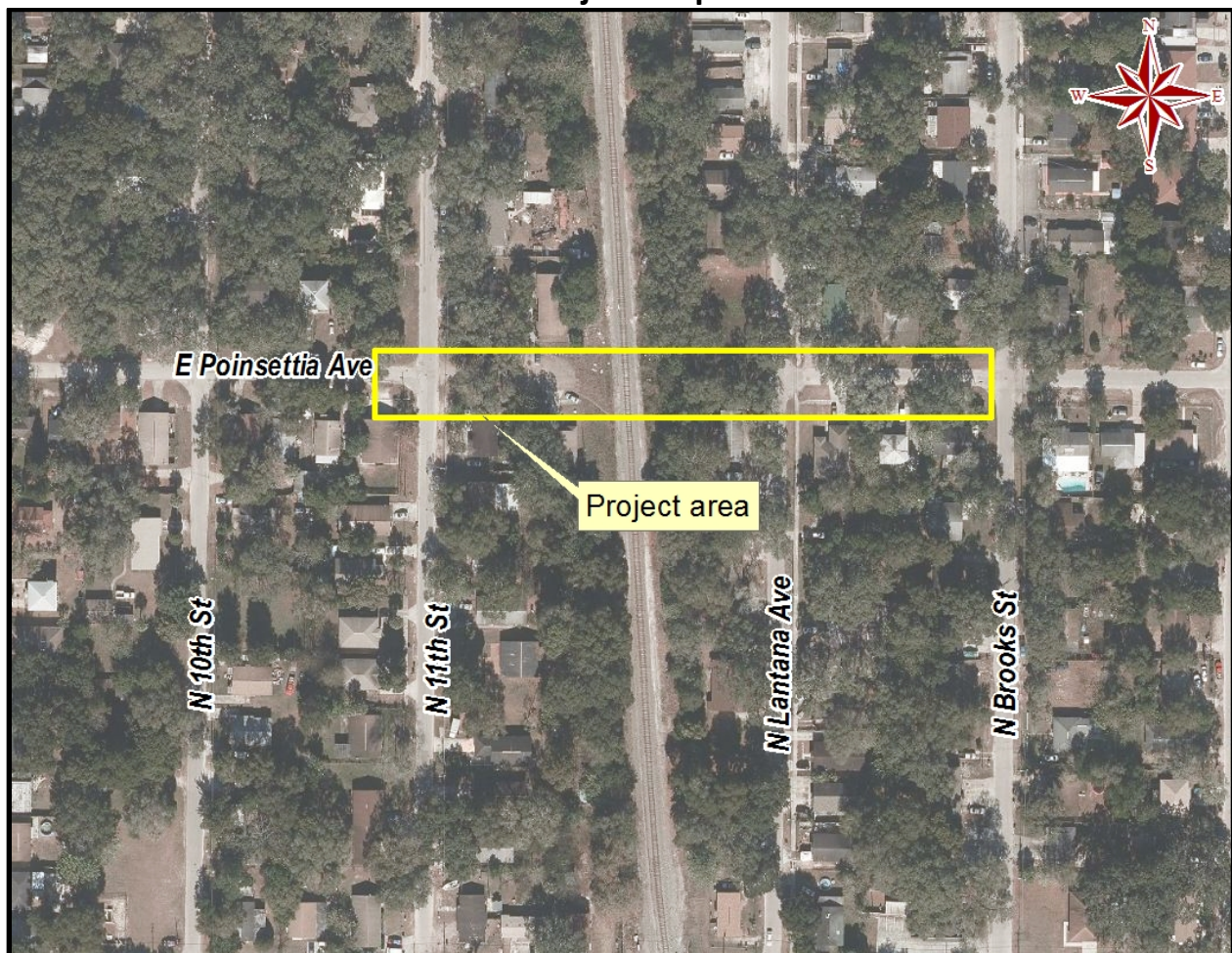
Project Description:

The project consists of property acquisition and construction of a new collection system, a new pumping station to replace the temporary pumping station, and force main connecting to the existing drainage system on N 11th St.

Justification:

Currently a temporary pump is utilized to drain the low-lying area along E Poinsettia Ave. between N Brood St. and N Lantana Ave. The proposed project will replace the temporary pump with a permanent pumping station.

Project Map



El Portal/Newport Pumping Station

FY2021, District 6
Estimated cost: \$350k

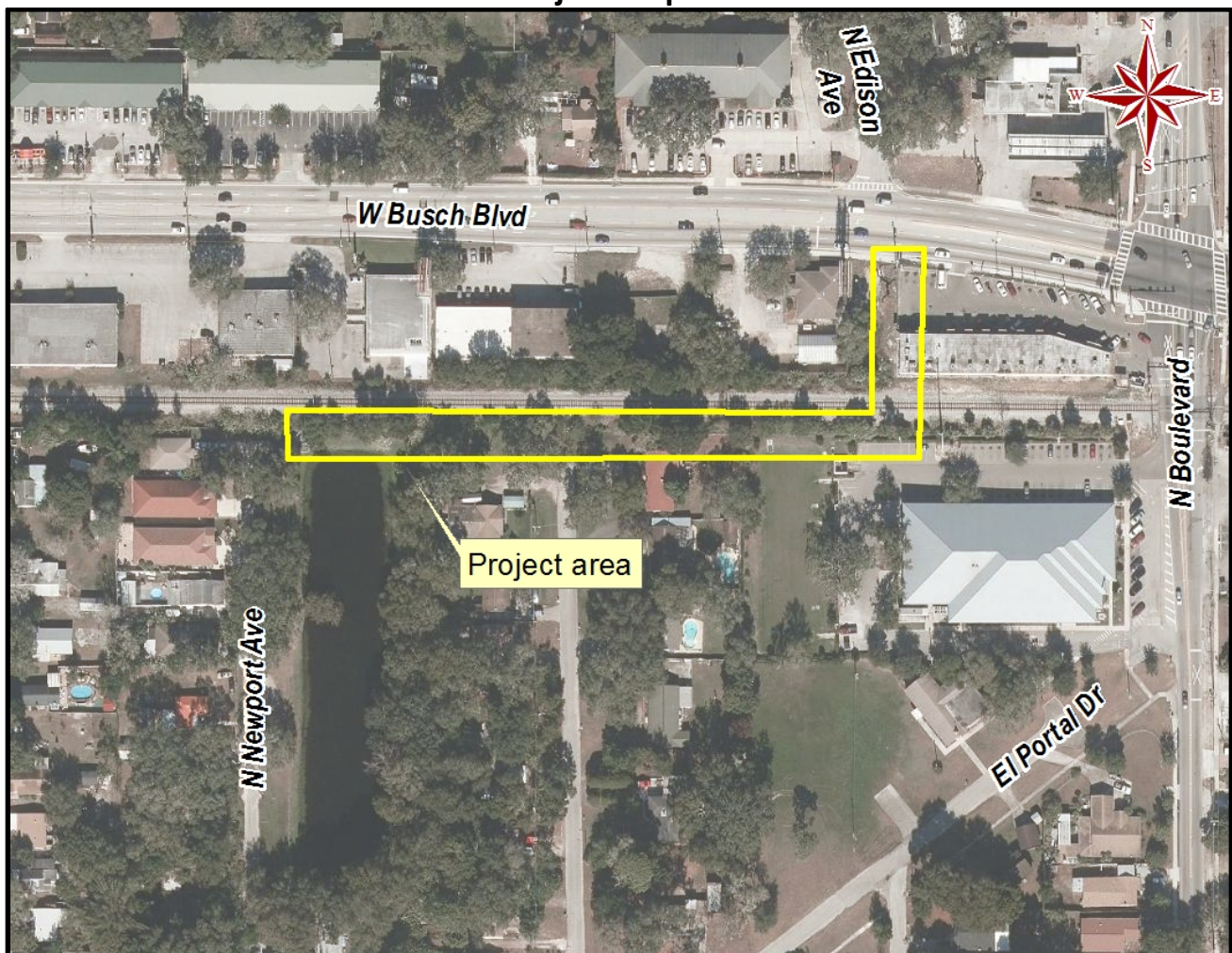
Project Description:

The project consists of construction of a new pumping station and force main connecting to the existing drainage system on Busch Blvd.

Justification:

The pond located at N Newport Ave. and Busch Blvd. area currently discharges via a temporary pump. The proposed project will replace the temporary pump with a permanent pumping station to provide a more reliable outfall for the pond system.

Project Map



Lake Roberta Sediment Trap Upgrade

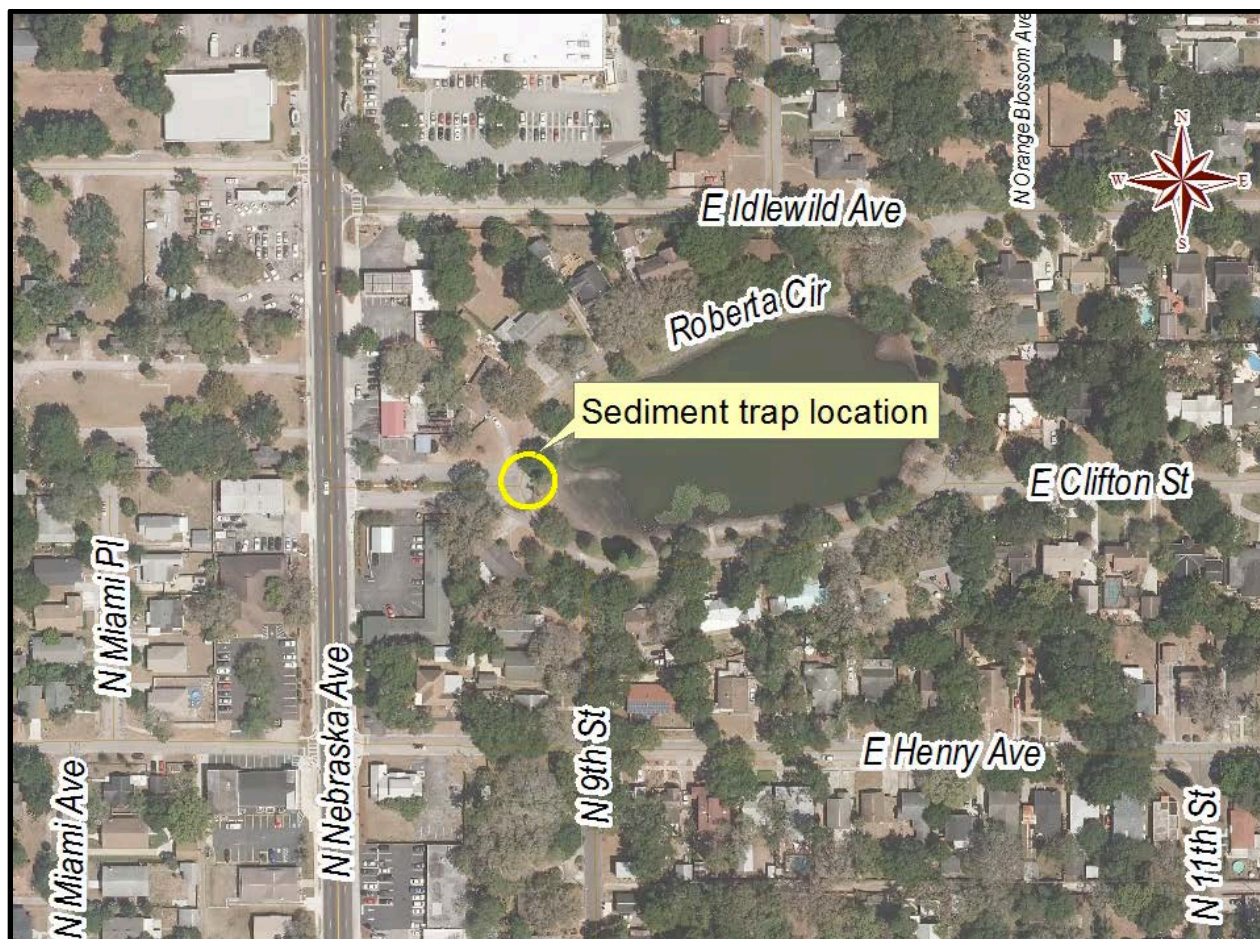
Water Quality Improvements FY2020; District 5

Estimated cost: \$400K

Project Description:

The City of Tampa has contracted with the University of South Florida (USF) College of Engineering to evaluate stormwater sediment traps throughout the city. The existing Lake Roberta sediment trap at E Clifton St. does not sufficiently capture all the trash from Nebraska Ave. It is one of the unit locations that is being monitored and sampled continuously by USF in order to estimate pollution loads into the stormwater units as part of the study. USF will review monitoring results and make a recommendation for the existing sediment trap model. The proposed project will upgrade the existing sediment trap accordingly to reduce pollutant loading into the lake.

Project Map



New Port, Willow, Orleans, and Watrous

Groundwater Diversion FY2020; District 4

Estimated cost: \$900K

PROJECT DESCRIPTION:

This area of Hyde Park has experienced extremely high groundwater level causing seepage from the cracks in the sidewalks, driveways and roadway. This seepage has killed roadway trees and prompted a growth of algae on the street and sidewalks, posing a hazard to pedestrians and traffic.

The proposed project includes the installation of underdrain systems along each side of the roadways. The new underdrain systems will be connected to the existing inlets along Bayshore Blvd for discharge to Hillsborough Bay.

Project Map



Beach Park Drainage Improvement

Flooding Relief FY2020; District 6

Estimated cost: \$750K

- **Project Description:**

This project consists of construction of new pipes and inlets connecting to the existing system on Swann Ave. to alleviate flooding in the area.

- **Justification:**

Flooding occurs in the area due to insufficient drainage capacity of the existing system. The proposed project will provide a second outlet for the low lying area to reduce the localized flooding.

Project Map



Manhattan: Vasconia to Bay To Bay

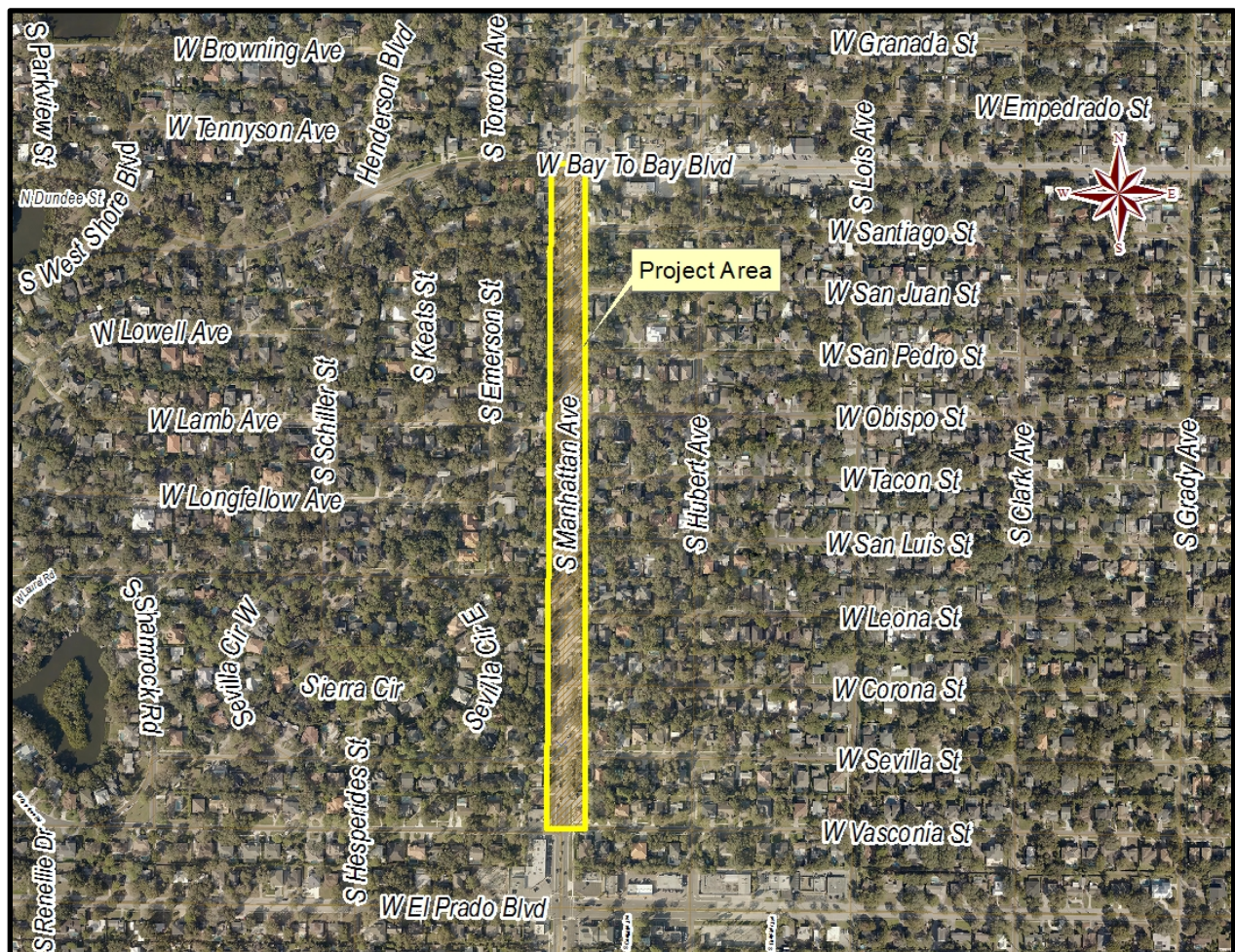
Flooding Relief FY2020; District 4

Estimated cost: \$3M

Project Description:

This section of Manhattan Ave. has experienced flooding due to lack of a stormwater system. The proposed project consists of installation of new inlets and pipes connecting to the existing Vasconia system to provide flooding relief for the area.

Project Map



Idell Street Roadway Improvements PH II

Flooding Relief FY2017, District 5

Estimated cost: \$75K

Project Description:

Construction of new ditch system discharging to the Hillsborough River.

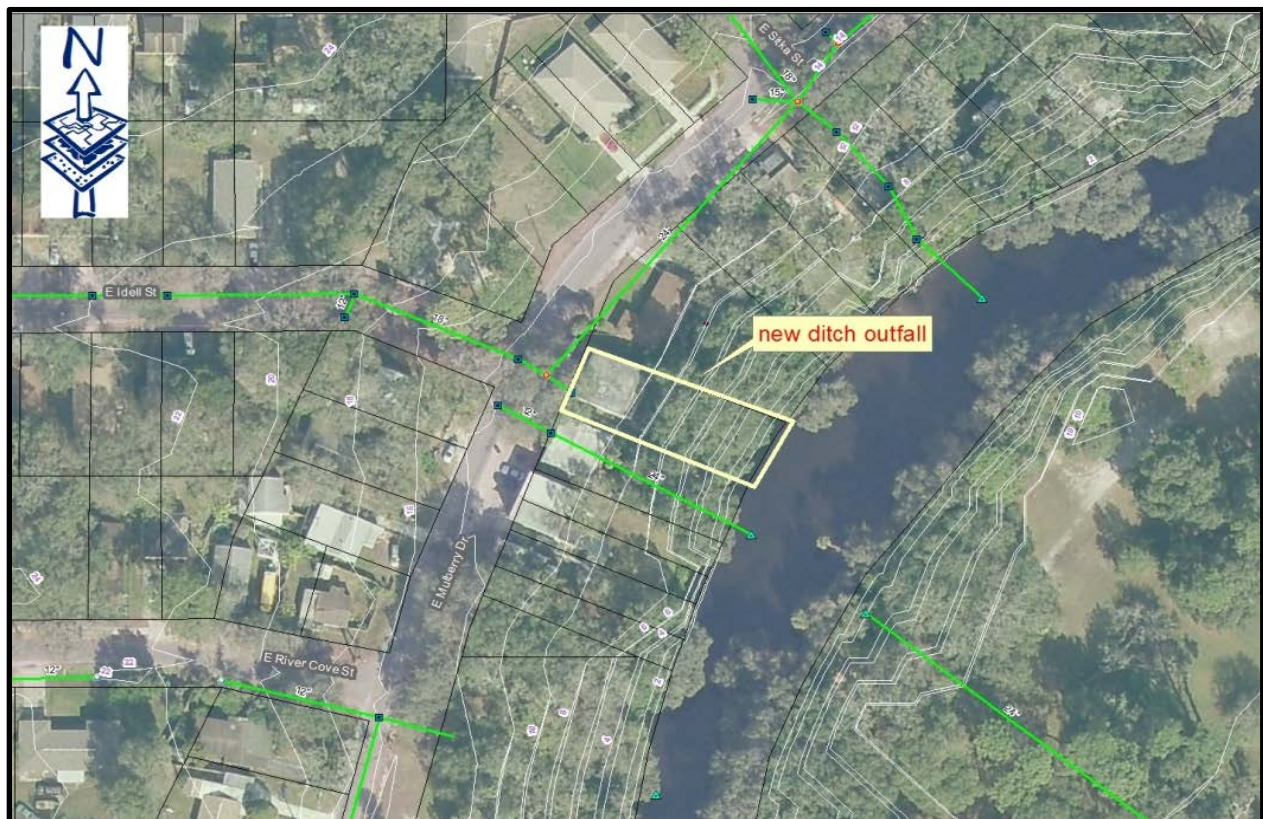
Justification:

Phase 2 of Idell Street Roadway improvements which will provide for a new outfall into the River. Stormwater in-house construction crews will be responsible for installing the new outfall via ditch to the River.

Related Issues:

Site located at 1911 East Mulberry.

Project Map



Concordia Pond

Flooding Relief FY2017, District 4

Estimated cost: \$125K

Project Description:

Four parcels have been acquired to construct a drainage pond to provide additional drainage system capacity before discharge to box culvert in adjacent CSX corridor.

Justification:

During heavy rain events, several parcels at the corner of Concordia and Kensington experience flooding due to outdated drainage system.

Related Issues:

A CSX drainage connection permit will be obtained before construction.

Project Map and Photo



Seneca Pumping Station Site Improvements

Flooding Relief FY 2017, District 7

Estimated cost: \$100K

Project Description:

This project will include constructing a new control structure on the existing outflow pipe, stabilizing the pond banks, and controlling erosion caused by runoff flow from adjacent properties.

Justification:

Seneca Pumping Station was determined to be obsolete and unnecessary due to reconfigurations of the drainage system serviced by Curiosity Creek Pumping Station. Under Phase 1, the pumping station building and mechanical equipment were removed. The runoff accumulated in the Seneca pond will flow north to 109th Avenue.

Project Map and Photo



Gomez Alley between Kennedy & North A Street

Flooding Relief FY2019, District 4

Estimated cost: \$75K

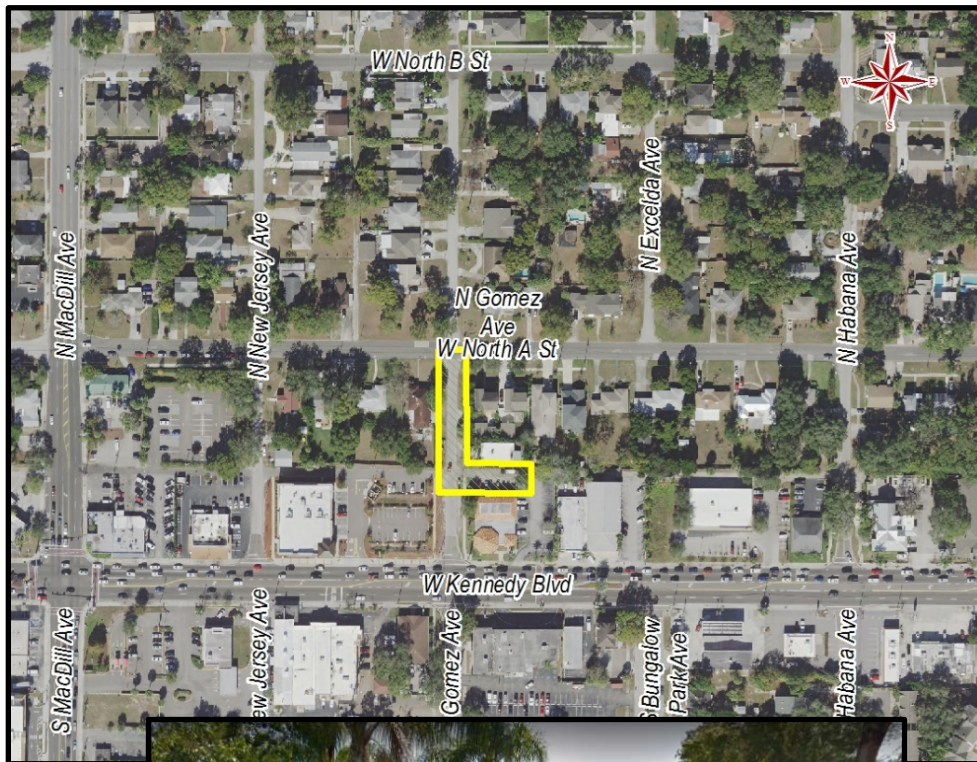
Project Description:

The project consists of construction of new inlets and pipes connecting to the existing drainage system on West North A Street and regrading of the roadway as needed.

Justification:

Localized flooding occurs in the low lying Gomez alley area. The proposed project will alleviate the flooding.

Project Map and Photo



Gomez Alley Ph2 (Re-profiling)

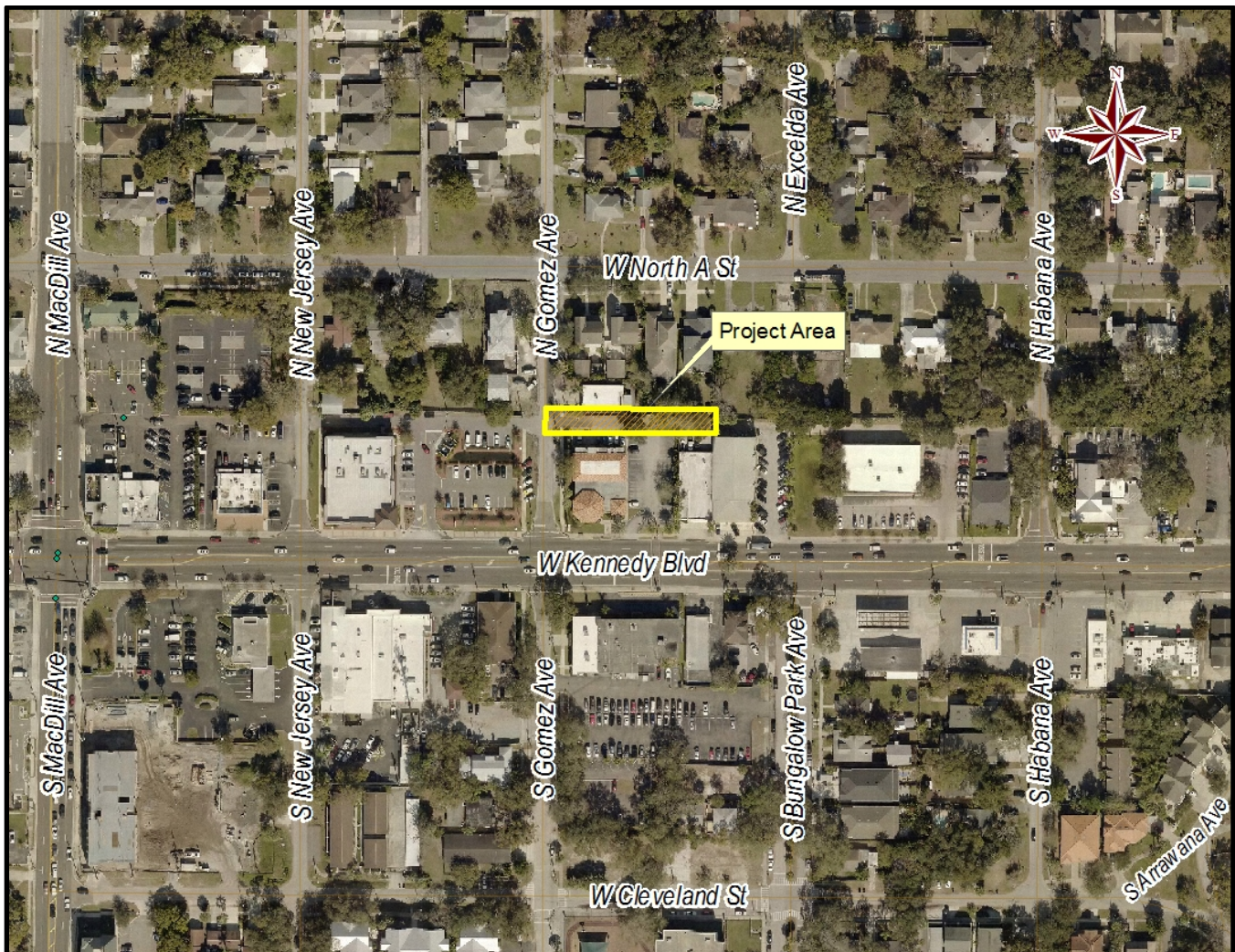
Flooding Relief FY2019, District 4

Estimated cost: \$75K

Project Description:

Localized flooding occurs in the low lying Gomez alley area. Phase 2 of the project consists of re-grading the alley to direct stormwater runoff to the newly constructed inlet system to be collected and conveyed.

Project Map



Binnicker at 4th Street

Flooding Relief FY2018, District 4

Estimated cost: \$50K

Project Description:

The project consists of construction of new pipes and inlets and regrading of the roadway as needed.

Justification:

Localized flooding occurs at intersection of West Binnicker Avenue and South 4th Street. The proposed project will alleviate the flooding.

Project Map



Neptune/Treasure Drainage Improvement

Pipe in Ditch FY2018, District 6

Estimated cost: \$75K

Project Description:

The proposed project will pipe in the existing ditch with a shallow swale.

Justification:

The ditch is eroded and in need of restoration. The proposed project will prevent further erosion and enhance public safety.

Project Map



3911 Swann Avenue

Flooding Relief FY2018, District 6

Estimated cost: \$50K

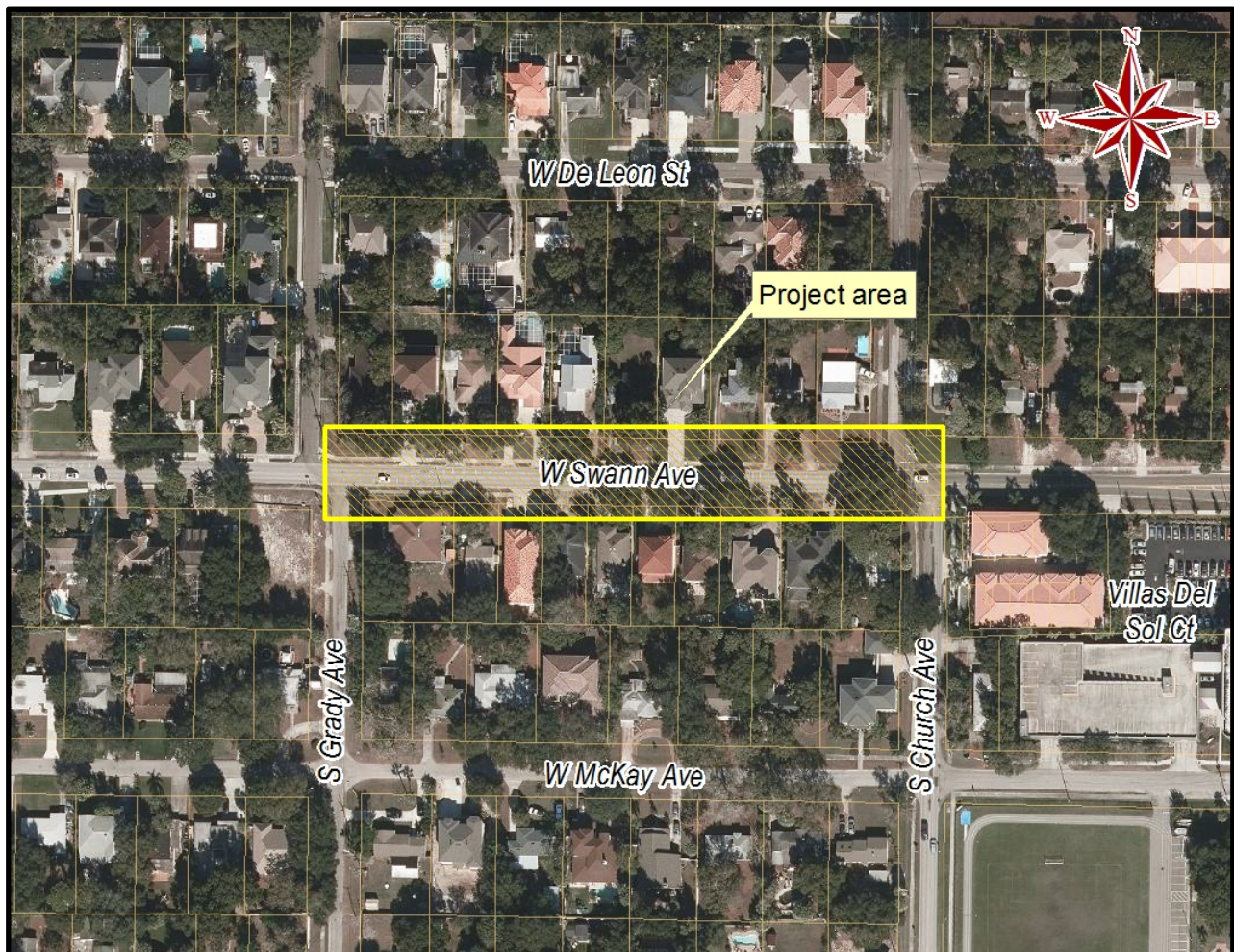
Project Description:

The proposed project consists of converting some existing manholes to inlets.

Justification:

Low lying areas on the street experience street and yard flooding. This project will alleviate the localized flooding.

Project Map



Rambla Flooding Relief

FY2018, District 7

Estimated cost: \$100K

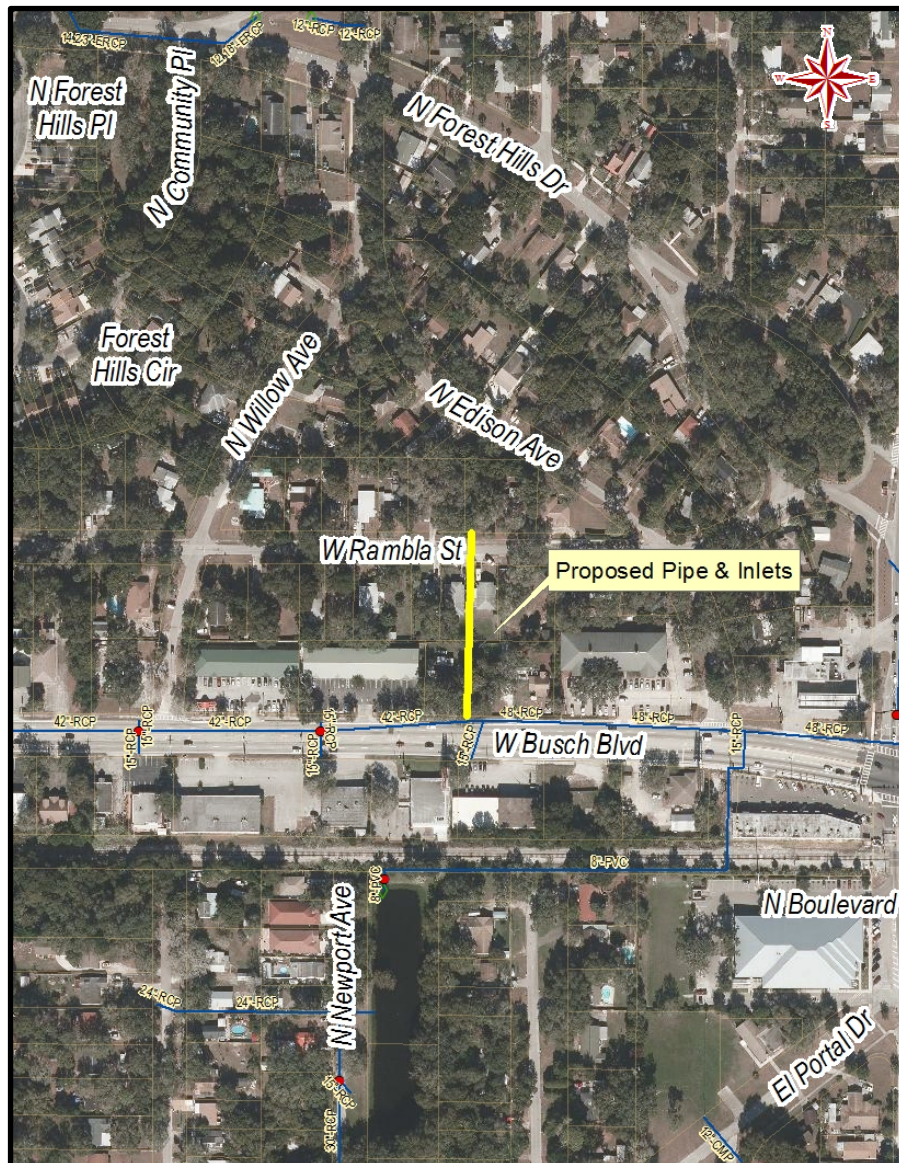
Project Description:

The proposed project will consist of construction of new inlets and pipes connecting to the existing drainage system.

Justification:

Properties on Rambla Street between Edison Avenue and Willow Avenue experience chronic flooding. The project will alleviate the flooding in the area.

Project Map



West Jetton Avenue from Armenia To Moody

Flooding Relief FY 2017, District 4

Estimated cost: \$125K

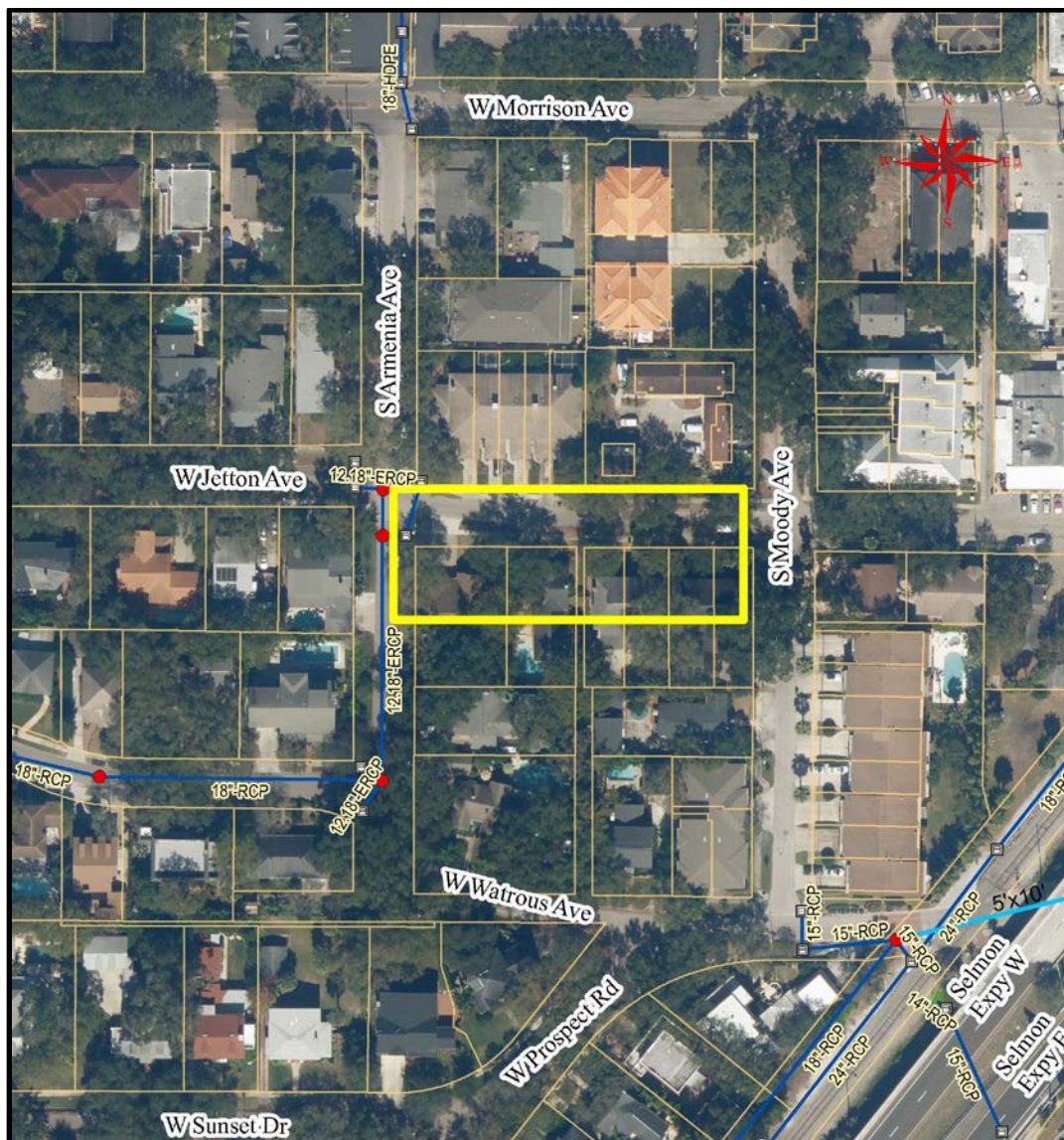
Project Description:

Storm pipe and inlet system will be installed and connected to the existing stormwater system to reduce flooding in the area.

Justification:

Flooding complaint reported from residents on 2400 block Jetton Avenue. The proposed project will alleviate the localized flooding.

Project Map



Hale Avenue at Cleveland Street Flooding Relief

Flooding Relief FY 2020, District 6

Estimated cost: \$100K

Project Description:

The proposed project consists of construction of new pipes and inlets, and regrading of the roadway as needed.

Justification:

South Hale Avenue between West Kennedy Boulevard and West Cleveland Street experiences frequent and dangerous flooding during short, intense rainfalls. The existing stormwater infrastructure on South Hale Avenue is old and undersized. The proposed project will alleviate the current flooding situation and ultimately reduce flood stages.

Project Map and Photo



North Street & 17th Street Flooding Relief

Flooding Relief FY 2018, District 5

Estimated cost: \$75K

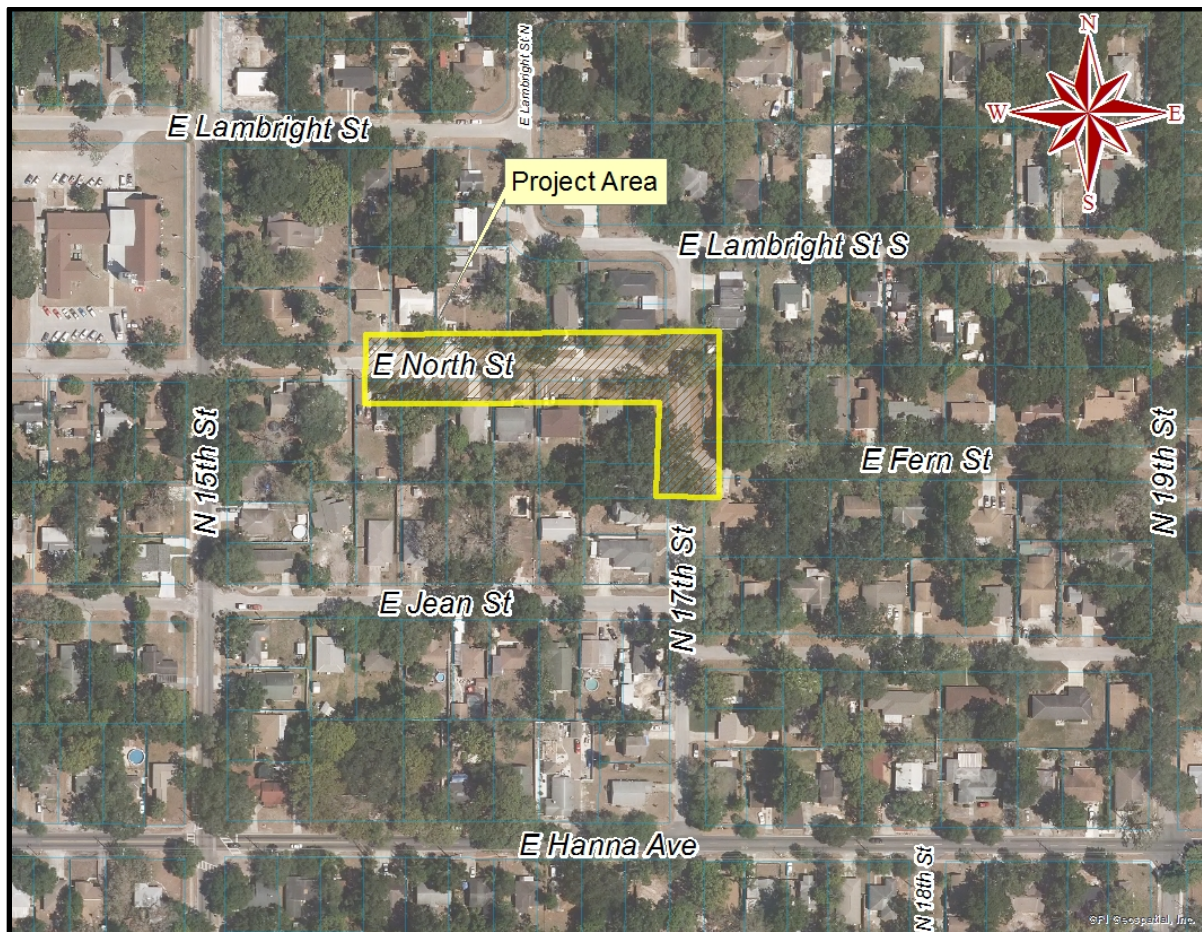
Project Description:

The project consists of construction of new pipes and inlets and regrading of the roadway as needed.

Justification:

Localized flooding occurs in the low area of East North Street due to improper grading/lack of drainage system.

Project Map



Ballast Point Boulevard at MacDill Avenue

Flooding Relief FY 2019, District 4

Estimated cost: \$125K

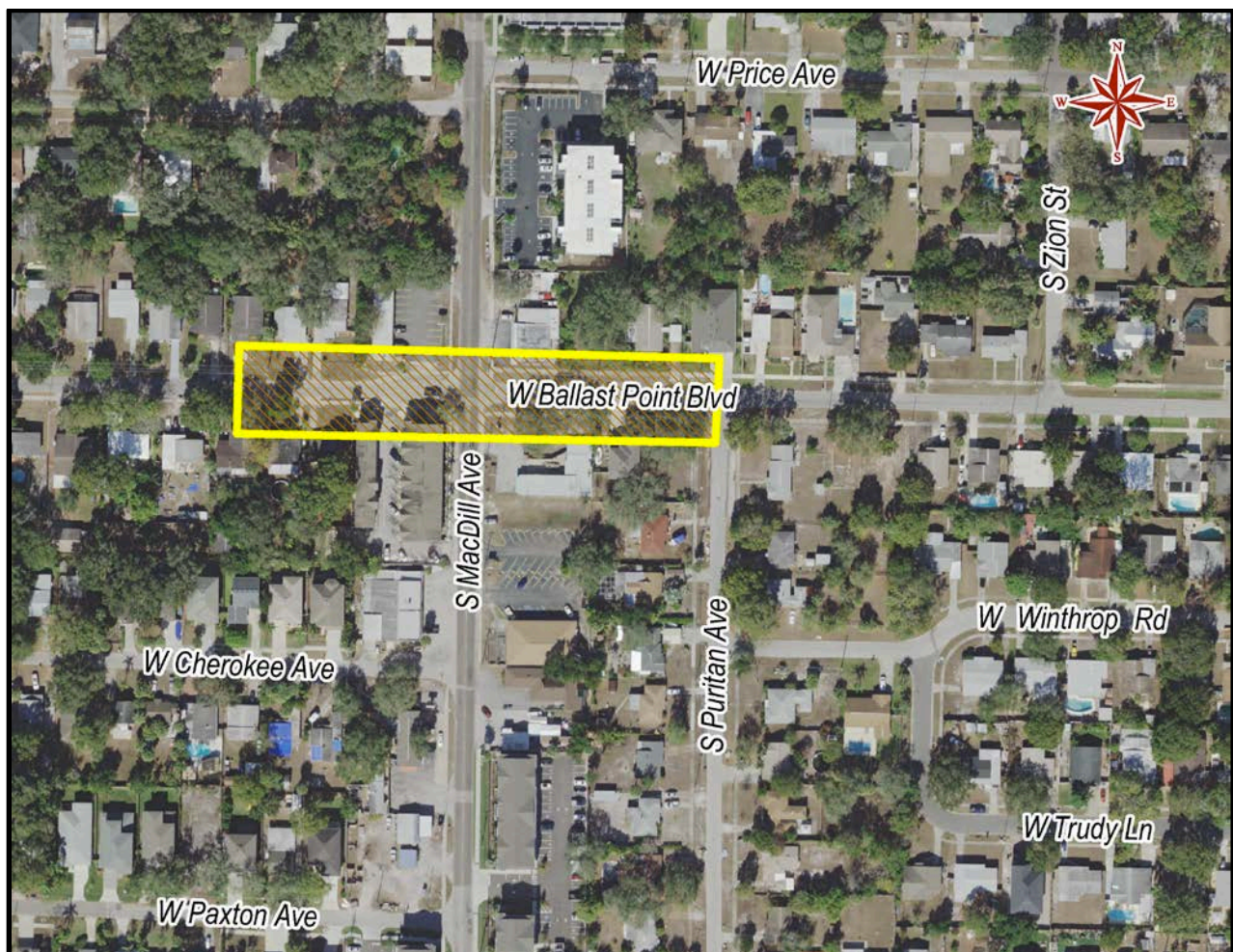
Project Description:

The project consists of construction of new surface water management facilities and roadway re-grading.

Justification:

The intersection experiences frequent flooding from blocked drainage resulting from the cumulative impact of sidewalk additions and street overlayment. The project will improve conveyance to relieve flooding in the intersection.

Project Map



Chelsea Street at 44th Street Flooding Relief

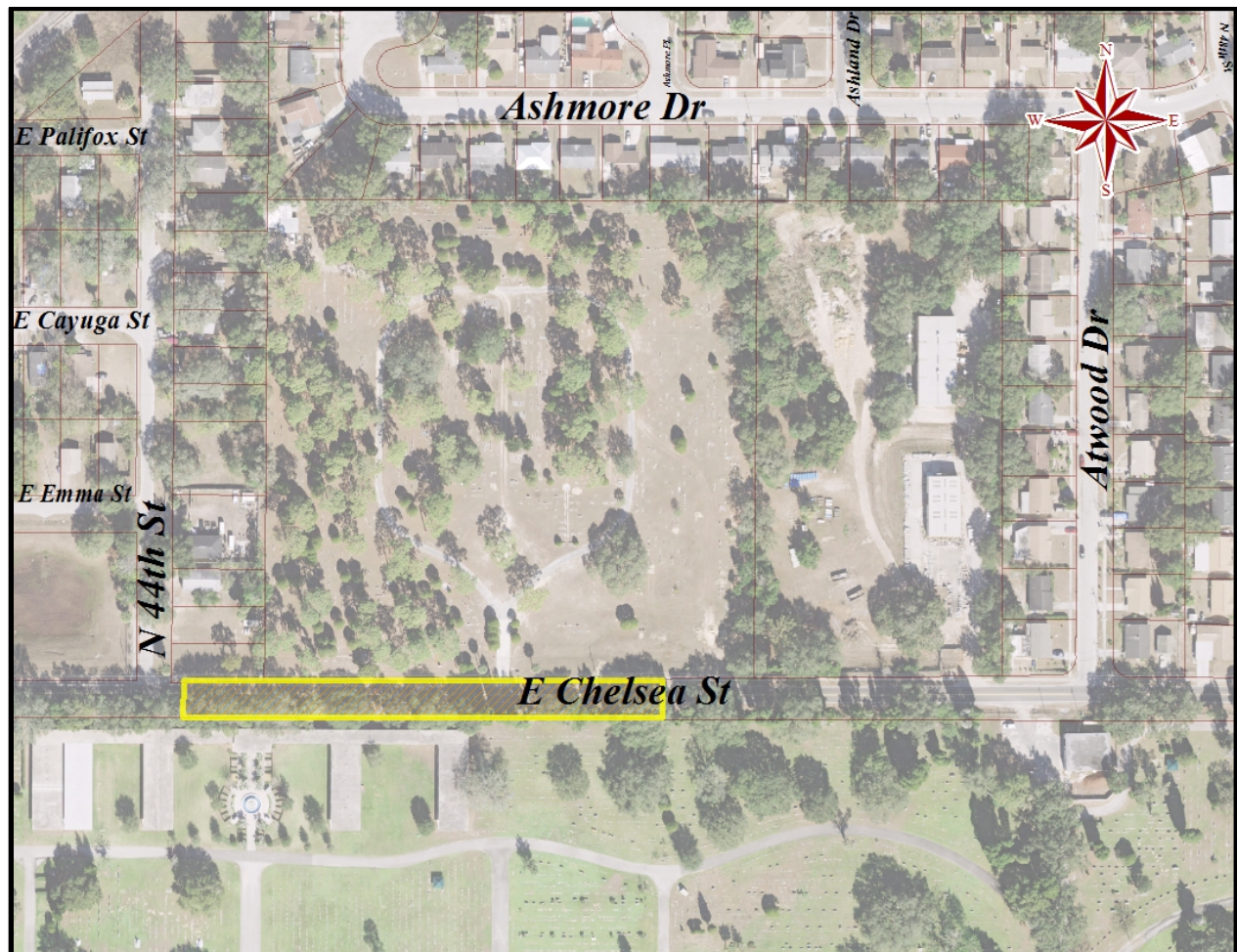
Flooding Relief FY 2020, District 5

Estimated cost: \$90K

Project Description:

Low-lying areas on East Chelsea Street between North 44th Street and Atwood Drive experiences frequent flooding. The proposed project consists of construction of new pipes and inlets connecting to the existing drainage system to alleviate the current flooding situation.

Project Map



Everina Street from Carrington to Coachman

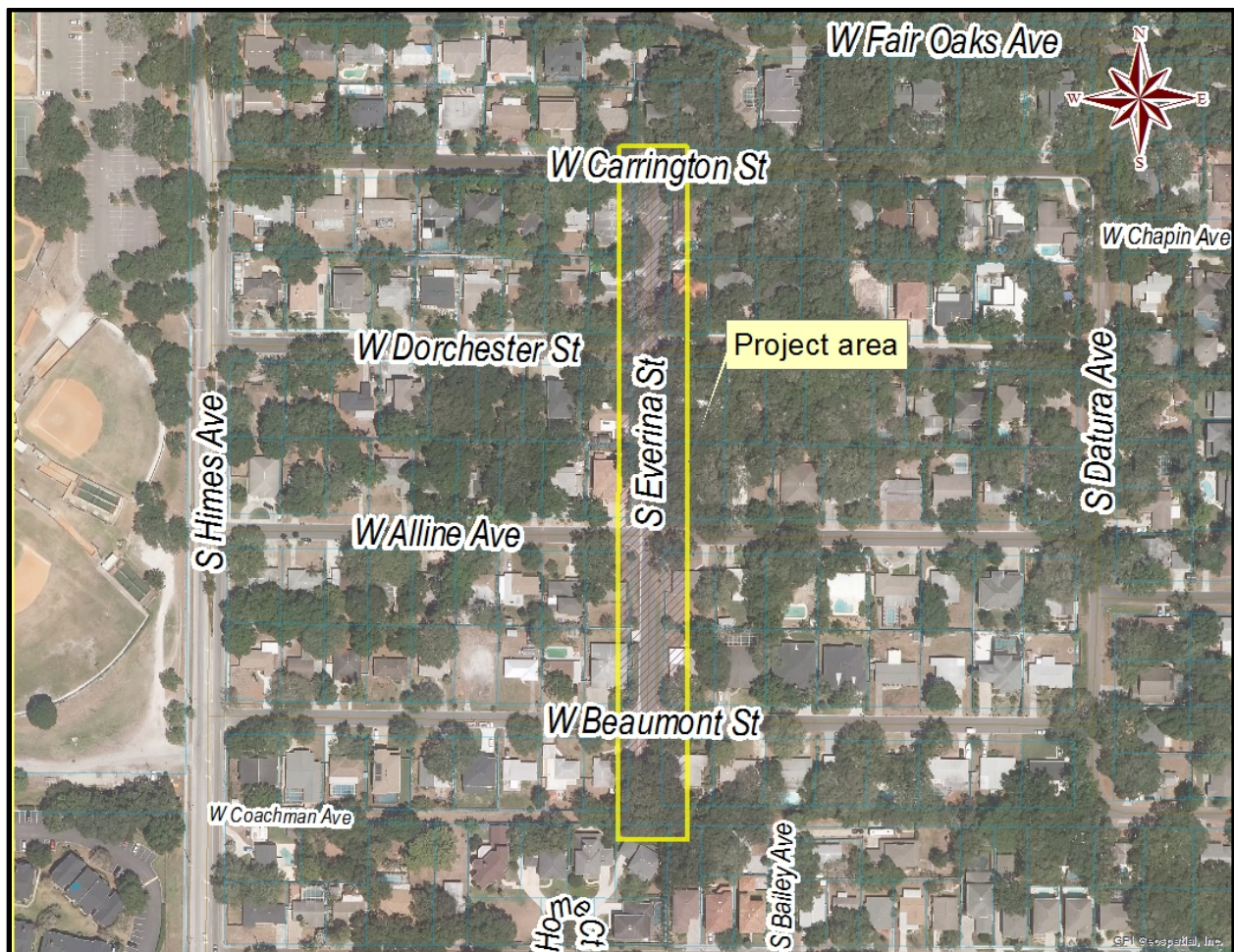
Flooding Relief FY 2020, District 4

Estimated cost: \$200K

Project Description:

This section of S Everina Street has experienced localized flooding in the past. The scope of this project is to install new pipes and inlets connecting to the existing system to provide flooding relief for the residential neighborhood.

Project Map



Okara & 26th St. Force Main

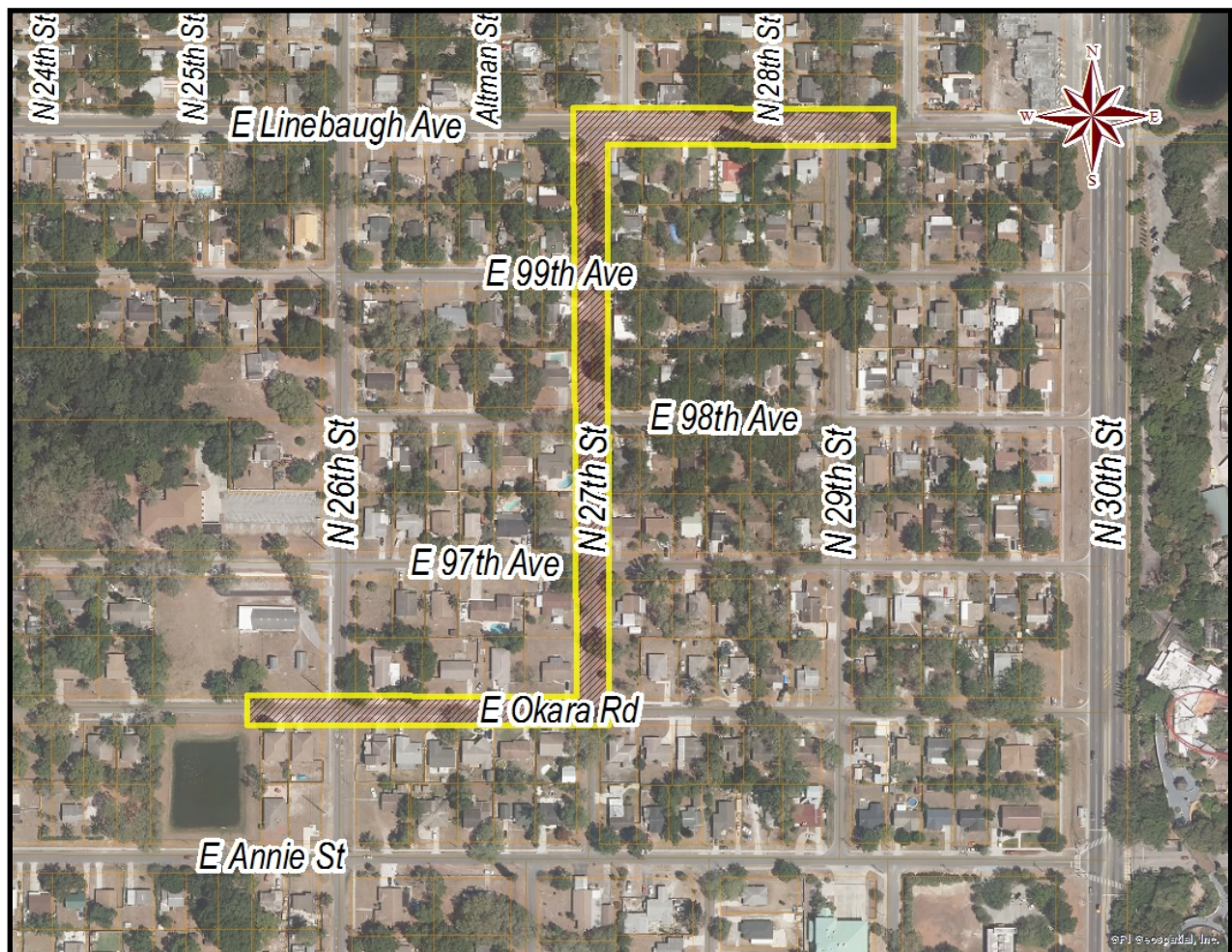
Flooding Relief, District 7

Estimated cost: \$90K

Project Description:

Currently the pond located at Okara Rd. and 26th St. outfalls via a temporary pump and force mains. The proposed project will replace the force main system. The temporary pump will be replaced with a permanent pumping station later under a separate project.

Project Map



Bougainvillea Pond Outfall

Flooding Relief, District 7

Estimated cost: \$75K

PROJECT DESCRIPTION:

The existing pond located at the intersection of 46th St. and Bougainvillea Ave. does not have an outfall. The pond overflows and floods the adjacent properties and streets after heavy rainfalls. The proposed project will provide an outfall for the pond to alleviate the flooding. Project includes the installation of control structure for the pond with pipes connecting it to the existing system on Bougainvillea Ave.

Project Map



Fire Station 20 Drainage Improvements

Flooding Relief; District 7

Estimated cost: \$50K

PROJECT DESCRIPTION:

Fire Station #20, located on Bruce B. Downs Blvd. in New Tampa was built in the early days of stormwater design and permitting. The fire station site was designed to drain via surface runoff to a retention pond directly adjacent to the staff parking lot. The system has a history of poor performance and the pond often backs up and floods the parking areas and other parts of the site.

This project will relieve the repeat nuisance flooding of the staff parking and adjacent areas to provide for full-time access of the parking and surrounding areas by developing a discharge pipe from the pond to adjacent County facilities either in Bruce B. Downs Blvd. right-of-way or into a large County owned detention pond adjacent to the fire station

Project Map



21st and Annie Pond

Flooding Relief; District 7

Estimated cost: \$90K

PROJECT DESCRIPTION:

The N. 21st St. and E Annie St. area is located within the North Tampa Closed Basin. This area experiences frequent flooding due to inadequate conveyance system and lack of positive outfall. The proposed project will provide stormwater storage volume and improve local stormwater collection and conveyance system to alleviate the flooding by constructing a new stormwater pond and new pipes/inlets connecting to the pond.

Project Map





Section B

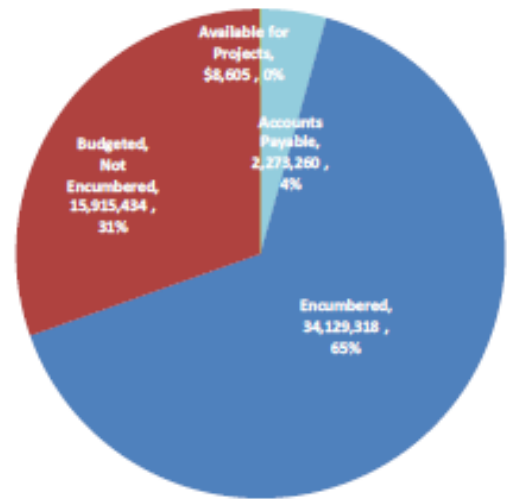
Stormwater Capital Improvement Bond Program Report

City of Tampa
Budget Office

Stormwater Assessment Revenue Bonds, Series 2018
As of November 30, 2019

Available Funding for Projects:

Bond Proceeds	97,782,033.00
Underwriters & Other Fees	(706,444)
Bank Note Refunding	(26,220,000)
Transfer to Capital Project Fund	<u>70,855,589</u>
Amount Expended to Date	(22,478,375)
Accounts Payable	2,273,260
Unused Fees and Interest Earnings	8,605
Appropriation of Earned Interest	<u>1,667,538</u>
Remaining Bond Proceeds	<u>52,326,616</u>
Accounts Payable	2,273,260
Encumbered	34,129,318
Budgeted, Not Encumbered	<u>15,915,434</u>
Available for Projects ⁽¹⁾	<u>\$8,605</u>



Spend-Down Schedule:

6 Months (10/26/2018)	10%	\$7,252,313
12 Months (04/26/2019)	45%	\$32,635,407
18 Months (10/26/2019)	75%	\$54,392,345
24 Months (04/26/2020)	100%	\$72,523,127

Percentage Spent - November 2019 31%
Bond Issuance Date 4/26/2018

Interest Earning Rate 0.11%
Bond Yield Rate 1.60%

Project Details:

Project Name	Project Number	Budget	Actuals	Encumbrance	Balance
43rd Street Outfall Regional Drainage Improv Ph III	1000151	\$5,231,844	185,688	5,046,155	1
Cypress Street Outfall Pipeline Extension	1000176	0	0	0	0
Upper Peninsula Flooding Relief, Ph. II - Vasconia	1000178	3,877,619	3,833,784	36,758	7,077
Orchid Sink Rehabilitation	1000384	580,935	513,094	0	67,841
Watrous Ditch Rehabilitation	1000386	90,604	60,581	188	29,835
Kensington Avenue	1000573	0	0	0	0
30th Street Outfall	1000580	40,000	28,794	10,963	243
Box Culvert Rehabilitation	1000581	1,013,749	808,800	0	204,949
Howard Avenue Flooding Relief Swann to Jetton	1000749	672,752	322,245	349,999	507
Lower Peninsula Watershed Plan	1000750	1,856,890	155,724	19,335	1,681,831

Project Name	Project Number	Budget	Actuals	Encumbrance	Balance
Ditch Rehabilitation	1000751	149,259	107,849	0	41,410
Southeast Seminole Heights Flood Relief	1000773	11,500,000	0	2,347,220	9,152,780
Upper Peninsula Watershed Drainage Improvement	1001017	16,873,600	8,610,546	8,129,678	133,376
Cypress Street Outfall Regional Stormwater	1001018	16,708,108	2,444,595	14,262,907	606
99th Avenue Pumping Station	1001164	25,056	0	0	25,056
6901 Sparkman Flooding Relief	1001165	7,708	0	0	7,708
Hamilton Creek Water Quality Improvements	1001169	500,000	36,133	113,352	350,515
Rogers Park Drainage Improvements	1001170	431,442	0	0	431,442
Lamb Canal Rehabilitation	1001171	1,500,000	40,669	109,046	1,350,285
North Tampa Closed Basins FY2018 - FY2022	1001173	4,231,653	3,116,342	1,060,164	55,146
Failed Pipe CIPP FY2018 - FY2022	1001175	1,645,194	925,794	535,255	184,145
In House Flooding Relief/Failed Pipe Replacement	1001176	215,470	157,128	57,546	795
Consultants and Land Acquisition FY2018 - FY2022	1001218	271,206	149,662	64,017	57,527
Annual Contract-Copeland Park	1001370	600,000	0	591,016	8,984
Annual Contract-Anita Sub PH2	1001371	1,300,000	0	1,257,054	42,946
In House Flooding Relief - 15th Street at Ellicott Street	1001405	125,000	0	0	125,000
In House Flooding Relief - 45th Street North of Hillsborough	1001406	240,000	228,419	9,938	1,643
In House Flooding Relief - Annette Ave & Bougainvillea Ave	1001407	150,000	0	0	150,000
In House Flooding Relief - Emma Street and Seminole Ave	1001408	100,000	0	0	100,000
In House Flooding Relief - Fair Oaks and Bayshore	1001409	10,000	0	0	10,000
In House Flooding Relief - North Street & Packwood Pond	1001410	100,000	0	0	100,000
In House Flooding Relief - South Ave: Grady Ave to Cortez Ave	1001411	0	0	0	0
In House Flooding Relief - 17th Street and Annona Avenue	1001412	150,000	0	0	150,000
In House Flooding Relief - Ballast Point Blvd at MacDill Ave	1001413	125,000	0	0	125,000
In House Flooding Relief - Gomez Alley (Kennedy & North A)	1001414	100,000	0	0	100,000
In House Flooding Relief - Rambla Street	1001428	100,000	36,247	1,703	62,050
West Saint Isabel from Gomez to Habana Flooding Relief	1001437	125,000	19,236	104,880	884
Virginia Ave Pumping Station Drainage Improvements	1001597	207,500	0	22,143	185,358
Project 000000 ⁽²⁾	0000000	1,628,518	687,290	0	941,228
Cost Allocation Stormwater ⁽²⁾	0900007	39,020	9,755	0	29,265
Grand Total⁽²⁾		\$72,523,127	\$22,478,375	\$34,129,318	\$15,915,434

⁽¹⁾ Available balance from unused issuance cost budget and interest earnings.

⁽²⁾ Includes \$1,667,538 of anticipated interest earnings which will cover \$39,000 of internal project management fees.



Section C

Stormwater Service Assessment Program Report

Tampa City Council Update No. 13 - December 2019

Maintenance activities are reported based on service level frequency. Below is a list of the primary maintenance categories that are being tracked. Along with service level cycle times, we have also provided maintenance statistics for the quarter.

Operations and Maintenance Activities	Pre Fee Service Levels	Fee Target Service Levels	1 st Quarter FY20 & Year-to-Date Service Levels
Ditches	10-Year Cycle	7-Year Cycle	9.4-Year Cycle (1 st Qtr.) 5.0-Year Cycle (Y.T.D)
Ponds	Minimal	3-Year Cycle	3-Year Cycle (1 st Qtr.) 3-Year Cycle (Y.T.D)
Pipes	10-Year Cycle	7-Year Cycle	8.8-Year Cycle (1 st Qtr.) 7.2-Year Cycle (Y.T.D)
Outfalls	15-Year Cycle	5-Year Cycle	1.0-Year Cycle (1 st Qtr.) 3.6-Year Cycle (Y.T.D)
Pumps	Low Preventative Maintenance	Annual Preventative Maintenance	1-Year Cycle
Street Sweeping	90-Day Cycle	60-Day Cycle	49-Day Cycle (1 st Qtr.) 54-Day Cycle (Y.T.D)
Operations and Maintenance Activities	1 st Quarter Maintenance Statistics		
Ditches	26,522 linear feet of ditches maintained with 3,669 tons removed, 31 fallen trees removed, 441,765 linear feet of ditch mowed monthly. Installed 275 linear feet of ditch bank was stabilized.		
Ponds	9.2 tons of trash and illegal dumping have been disposed of, there have been 111 herbicide treatments to various ponds, 1 pond harvesting activity was conducted removing 138.5 tons of vegetation removed, 126 stormwater ponds mowed monthly. 5,093 LF of pond fencing was replaced.		
Pipes	79,179 linear feet of storm drain pipe inspected and maintained, 3,214 storm drain inlets and manholes inspected and maintained with 258 tons of debris removed. 40 sediment traps cleaned removing 104 tons of debris. 35 cave-ins and 24 inlet tops repaired.		
Outfalls	175 outfalls inspected with no maintenance needed. Maintenance and inspection efforts are increasing due to lower than normal tides.		
Pumps	Preventative Maintenance provided to all thirteen (13) stormwater pump stations. Continuous monitoring is ongoing with proactive maintenance and inspections.		
Street Sweeping	5,888 curb miles were swept, approximately 1,264 tons of debris removed.		

Coolidge Ditch from Clark St. to Coolidge St.

Before



After



Coolidge Ditch from Clark St. to Coolidge St. (cont.)

Before



After



Canal South of E. 21st Ave along HART Operations Facility

Before

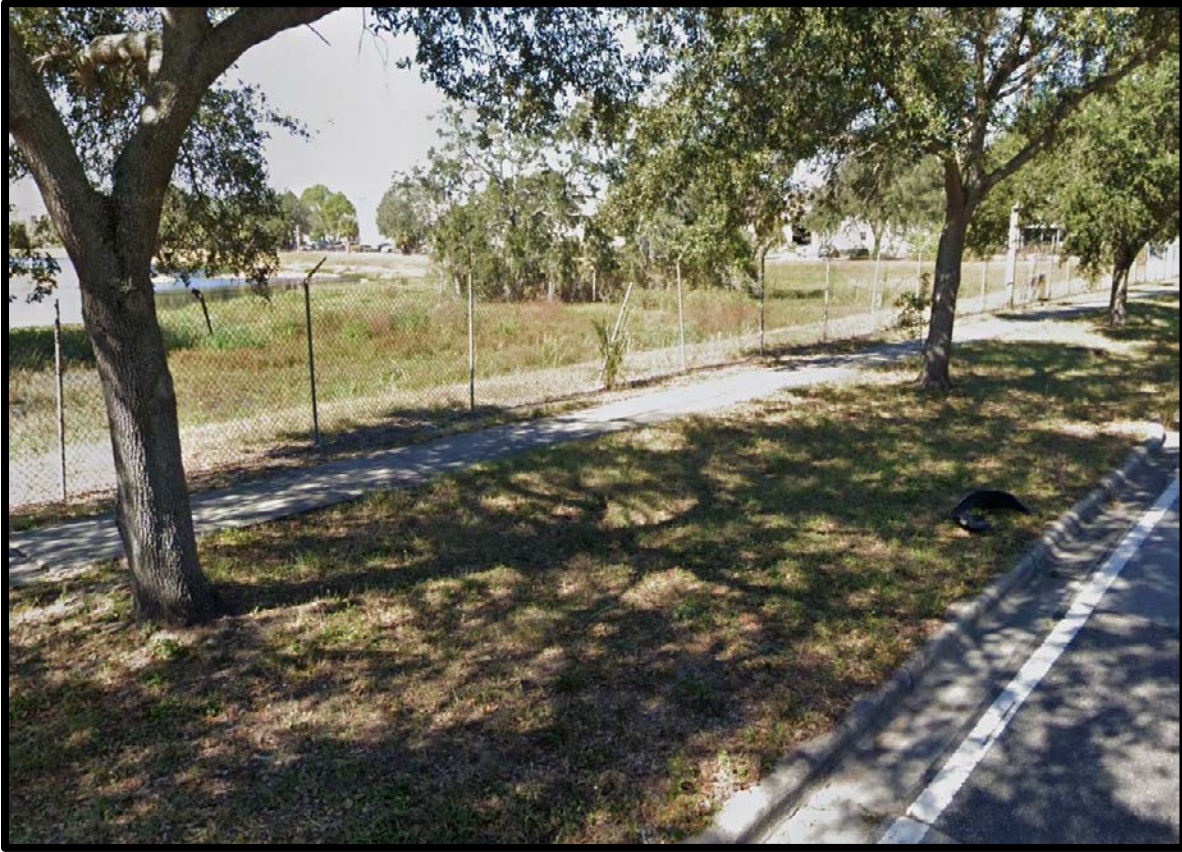


After



N. 46th St. at E. Bougainvillea Ave. – Pond Fence Replacement

Before



After

