



North Bay Village

Administrative Offices

1666 Kennedy Causeway, Suite 300 North Bay Village, FL 33141

Tel: (305) 756-7171 Fax: (305) 756-7722 Website:

www.nbvillage.com

AGENDA

NORTH BAY VILLAGE WORKSHOP PRESENTATION ON WATER, SEWER AND STORMWATER INFRASTRUCTURE PROJECTS

**VILLAGE HALL
1666 KENNEDY CAUSEWAY, SUITE #101
NORTH BAY VILLAGE, FL 33141**

**TUESDAY, MAY 8, 2018
6:00 P.M.**

-
1. **CALL TO ORDER**
 2. **PRESENTATION BY GARY RATAY, P.E.
KIMLEY-HORN & ASSOCIATES, INC.**
 3. **VILLAGE COMMISSION QUESTIONS**
 4. **ADJOURNMENT**

(Two or more members of the Village Commission may be in attendance.)



North Bay Village

PUBLIC WORKS DEPARTMENT

Kimley»Horn

Water and Wastewater CAPITAL IMPROVEMENT PROJECTS

May 2, 2018

Water and Wastewater

CAPITAL IMPROVEMENT PROJECTS



Project Names

- Sanitary Sewer Rehabilitation Program
- Water Main Rehabilitation Program
- Water Meter Replacement Program

Funding

- State Revolving Fund



Water and Wastewater

CAPITAL IMPROVEMENT PROJECTS



Project Description

- Sanitary Sewer Rehabilitation Program
 - Sewer system cleaning and videoing
 - Review videos and develop rehabilitation program
 - Sewer system main line repairs and lining
 - Manhole repairs and coating
 - Sewer lateral repairs and lining
- Rehabilitation versus replacement



Water and Wastewater

CAPITAL IMPROVEMENT PROJECTS



Project Description

- **Water Main Rehabilitation Program**
 - Water distribution system leak detection process
 - Field evaluation to determine system deficiencies
 - Review reports/videos and develop rehabilitation program
 - Water mains
 - Water services
 - Isolation valves
 - Fire hydrants
- Rehabilitation versus replacement



Water and Wastewater

CAPITAL IMPROVEMENT PROJECTS



Project Description

- Water Meter Replacement Program
 - Water meter inventory
 - Field evaluation to determine system deficiencies
 - Review reports and develop replacement program
 - Replace all water meters and water service lines
 - Mobile based Advanced Metering Infrastructure (AMI) and Water Loss Management System
 - Smart meters and customer portal
- Rehabilitation versus replacement



Water and Wastewater

CAPITAL IMPROVEMENT PROJECTS



Project Steps

- Planning
- Funding - State Revolving Loan
- Schematic Design
- Invitation to Bid/Contract Award
- Construction Contracts
- Construction Phase Services

Water and Wastewater

CAPITAL IMPROVEMENT PROJECTS



Planning

• Facilities Plan

- Project planning and justification of needs
- Development of alternatives
- Selected alternative and project description
- Opinion of probable cost
- Environmental impacts, Implementation, and Compliance

• Opinions of Probable Cost or Project Budgets

- Sanitary Sewer Rehabilitation Project - **\$4,800,000**
- Water Main Rehabilitation Project - **\$4,400,000**
- Water Meter Replacement Project - **\$4,200,000**

• Kimley-Horn Fees

- Sanitary Sewer Rehabilitation Facilities Plan, February 2015 - **\$7,900**
- Water Main Rehabilitation Facilities Plan, February 2015 - **\$6,180**
- Water Meter Replacement Facilities Plan, February 2015 - **\$5,880**

Table 2
North Bay Village
Water Main Facilities Plan

Alternative 2: Opinion of Probable Cost

ITEM	DESCRIPTION	QTY	UNIT	COST	TOTAL
GENERAL					
1	MOBILIZATION/DEMObILIZATION	1	LS	\$300,000	\$300,000
2	MAINTENANCE OF TRAFFIC	1	LS	\$300,000	\$300,000
SANITARY SEWER					
3	6" WATER MAIN REPLACEMENT	7200	FT	\$90	\$648,000
4	8" WATER MAIN REPLACEMENT	2200	FT	\$110	\$242,000
5	12" WATER MAIN REPLACEMENT	4400	FT	\$130	\$572,000
6	4" WATER VALVE REPLACEMENT	20	FT	\$800	\$16,000
7	6" WATER VALVE REPLACEMENT	60	EA	\$800	\$48,000
8	8" WATER VALVE REPLACEMENT	20	EA	\$1,300	\$26,000
9	12" WATER VALVE REPLACEMENT	40	EA	\$1,600	\$64,000
10	AIR RELEASE VALVE REPLACEMENT	20	EA	\$3,500	\$70,000
11	FIRE HYDRANT REPLACEMENT	20	EA	\$4,500	\$90,000
RESTORATION					
12	ROADWAY RESTORATION	1	LS	\$700,000	\$700,000
13	SITE RESTORATION	1	LS	\$350,000	\$350,000
SUBTOTAL					\$3,426,000
CONTINGENCY (15%)					\$514,000
PROFESSIONAL SERVICES DURING CONSTRUCTION					\$443,000
OPINION OF PROBABLE COST					\$4,400,000

Water and Wastewater

CAPITAL IMPROVEMENT PROJECTS



Funding

- State Revolving Fund (SRF) Program
 - Application to Florida Department of Environmental Protection (FDEP)
 - Planning Document – Facilities Plan
 - Develop loan agreements
- Loan Agreements Approved by FDEP
 - Schematic Design
 - Contract Documents – Invitation to Bid
 - Advertise Projects



Water and Wastewater

CAPITAL IMPROVEMENT PROJECTS



Schematic Design

- **Scope of Work**
 - Site visits and field reviews
 - Review available utility information
 - Develop rehabilitation approach
 - Coordinate approach with Village
- **Develop Contract Documents**
 - Schematic Plans
 - Bid form with Estimated Quantities
 - Front End Documents for Invitation to Bid (ITB)
- **Kimley-Horn Fees**
 - Sanitary Sewer Rehabilitation Contract Documents, October 2014 - \$44,690
 - Water Main Rehabilitation Contract Documents, October 2014 - \$35,020
 - Water Meter Replacement Contract Documents, October 2014 - \$46,050



NORTH BAY VILLAGE, FLORIDA



INVITATION TO BID
FOR
WATER METER REPLACEMENT PROGRAM

BID NO. NBV 2017-001



SEALED PROPOSALS WILL BE RECEIVED BY THE VILLAGE CLERK,
1666 KENNEDY CAUSEWAY, SUITE 300, NORTH BAY VILLAGE, FL 33141
ON OR BEFORE MARCH 10, 2017 4:00 P.M.
NORTH BAY VILLAGE, FLORIDA

Water and Wastewater

CAPITAL IMPROVEMENT PROJECTS



Invitation to Bid/Contract Award

• Advertise Project

- Pre-bid meetings
- Receive bids
- Technical review and selection committees
- Coordination with FDEP on contract award
- Village Commission approval and contact award

• Contract Awards

- Sanitary Sewer Rehabilitation Program – General Contractor Insituform Technologies, LLC
- Water Main Rehabilitation Program - General Contractor ROHL Networks, LP
- Water Meter Replacement Program - General Contractor Metro Express, Inc.

• Bid Amounts

- Sanitary Sewer Rehabilitation Program Bid Amount - \$2,375,375
- Water Main Rehabilitation Program Bid Amount - \$3,840,372
- Water Meter Replacement Program Bid Amount - \$3,215,410

Water and Wastewater

CAPITAL IMPROVEMENT PROJECTS



Construction Contracts

- Sanitary Sewer Rehabilitation Program – Insituform Technologies, LLC

- Project start date – May 12, 2016
- Final completion date – July 1, 2018
- Authorized time extensions - six
- Bid Amount - \$2,375,375
- Allowance Account - \$500,000 (Included in Bid Amount)
- Contractor billing to date - \$2,075,206
- Construction budget remaining – \$300,169

- Work Remaining

- Lateral point repairs
- SSES testing this summer
- Testing alternatives and potential rehabilitation requirements
- Site restoration



Water and Wastewater

CAPITAL IMPROVEMENT PROJECTS



Construction Contracts

• Water Main Rehabilitation Program – ROHL Networks, LP

- Project start date – June 8, 2017
- Final completion date – September 24, 2018
- Authorized time extensions - three
- Bid Amount - \$3,840,372
- Allowance Account - \$500,000 (Included in Bid Amount)
- Contractor billing to date - \$639,113
- Construction budget remaining – \$3,201,259



• Work Remaining

- Water distribution leak detection and rehabilitation evaluation
- Continue with water main improvements
- System testing and coordination with Health Department
- Site restoration
- Currently on schedule



Water and Wastewater

CAPITAL IMPROVEMENT PROJECTS



Construction Contracts

- Water Meter Replacement Program – Metro Express, Inc.
 - Project start date – August 1, 2017
 - Final completion date – September 4, 2018
 - Authorized time extensions - one
 - Bid Amount - \$3,215,410
 - Allowance Account - \$340,000 (Included in Bid Amount)
 - Contractor billing to date - \$467,288
 - Construction budget remaining – \$2,748,122
- Work Remaining
 - Continue with Mobile based AMI software/network installation and coordination
 - Continue with water service and meter installation
 - Site restoration
 - System testing, start up, and training
 - Currently on schedule



Water and Wastewater

CAPITAL IMPROVEMENT PROJECTS



Contact Phase Services

- **Scope of Work**
 - Progress Meetings
 - Program Evaluation and Development/Design
 - Public Involvement Assistance
 - Resident Project Representative
 - Shop Drawing Review
 - Contract Clarification
 - Review of Pay Application
 - Coordination with SRF Program
 - Project Close-out
- **Contract Administration and Program Evaluation**
 - Schematic design during initial design phase
 - System evaluation and design requirements during the construction phase
 - Coordination with FDEP on design development, cost, and time extensions
 - Field coordination for contractor payment application compliance with SRF criteria



WATER MAIN REHABILITATION PROGRAM UPDATE

As the Water Main Rehabilitation Program continues, water main construction/replacement work will be starting in your area.

Location: Bounty Avenue from North Treasure Drive to South Treasure Drive
Schedule: March 19, 2018 through April 19, 2018
Hour of Operation: 8:00 am - 5:00 pm

Work will include excavation for the installation of new water main, new water service lines, new fire hydrants, and associated roadway/site restoration. Once the new water main is constructed, water interruptions will occur when the new water main is connected to the existing water distribution system. Additional notification will be provided before water interruptions are scheduled.

This construction will require closing roads to local traffic only. Traffic signage will be implemented and maintained as needed. After the new water main piping is connected, residents may see temporary water discoloration, if that should happen please run the water until it clears up.

The above schedule is subject to change due to unforeseen circumstances. Thank you for your cooperation and patience as the Village moves forward with the Water Main Rehabilitation Program. Project updates will be available at www.nbvillage.com. Any questions regarding this matter, please contact Janet Delgado, Public Information Officer, at 305-6195313 or via e-mail at janet.delgado@kimley-horn.com.

Water and Wastewater

CAPITAL IMPROVEMENT PROJECTS



Contact Phase Services

- **Kimley-Horn Work Authorizations – Sanitary Sewer Rehabilitation Program**
 - 16-01 signed February 2, 2016, 10 month duration - \$341,500
 - 17-03 signed May 16, 2017, 3 month duration - \$66,400
 - 17-10 signed November 14, 2017, 7 month duration - \$101,500
 - Total Kimley-Horn Fee - \$509,400
 - To date, the contract has been ongoing for 24 months. Current final completion date is July 1, 2018
- **Kimley-Horn Work Authorizations – Water Main Rehabilitation Program**
 - 17-01 signed March 23, 2017, 11 month duration - \$307,200
 - 18-05 approved April 10, 2018, 5 month duration - \$98,700
 - Total Kimley-Horn Fee - \$405,900
 - To date, the contract has been ongoing for 11 months. Current final completion date is September 24, 2018
- **Kimley-Horn Work Authorization – Water Meter Replacement Program**
 - 17-02 signed May 16, 2017, 12 month duration - \$313,700
 - Total Kimley-Horn Fee - \$313,700
 - To date, the contract has been ongoing for 9 months. Current final completion date is September 4, 2018

Water and Wastewater

CAPITAL IMPROVEMENT PROJECTS



Program Cost Summary

<i>Capital Improvement Projects</i>	<i>SRF Loan Amount</i>	<i>Kimley-Horn Authorized Fee</i>	<i>Contractor Bid Amount</i>	<i>Kimley-Horn Billed to Date</i>	<i>Contractor Billed to Date</i>	<i>Remaining Loan Amount</i>
Sanitary Sewer Rehabilitation Program	\$4,800,000	\$562,000	\$2,375,375	\$506,500	\$2,075,207	\$2,218,293
Water Main Rehabilitation Program	\$4,400,000	\$447,100	\$3,840,372	\$269,650	\$639,113	\$3,491,237
Water Meter Replacement Program	\$4,200,000	\$365,630	\$3,215,410	\$161,230	\$467,288	\$3,571,482
Total Amounts	\$13,400,000	\$1,374,730	\$9,431,157	\$937,380	\$3,181,608	\$9,281,012

- SRF Loan Amounts include Village staff costs
- Kimley-Horn fees include planning, design, and construction phase services, 2014 to present
- Contactor Bid Amounts can be increased to SRF loan amounts if needed and approved
- Contractor Billed to Date amounts do not reflect all work to date



North Bay Village
PUBLIC WORKS DEPARTMENT

Kimley»Horn

Water and Wastewater CAPITAL IMPROVEMENT PROJECTS

May 2, 2018

Water and Wastewater

CAPITAL IMPROVEMENT PROJECTS



Kimley-Horn Work Authorizations for the last five years

Cust Name	Proj Id	Proj Name	Proj Description	Proj Mgr. Name	Start Dt	Contract Val	Active
North Bay Village	043138019.1	VILLAGE HALL FM CPS	Construction Phase Services - Construct new force main to connect Village Hall pump station to force main system.	RATAY, GARY	02/16/13	\$19,800	N
North Bay Village	043138020.1	SSES UPDATE 2013	Report - 2013 SSES report for submittal to DERM.	RATAY, GARY	05/16/13	\$11,800	N
North Bay Village	043138021.1	ASSET INVENTORY & RATE STUDY	Report - Evaluate the Village's infrastructure assets as part of developing an associated rate study.	RATAY, GARY	08/01/13	\$39,100	N
North Bay Village	043138022.1	BAYWALK PLAZA AREA DESIGN	Design - Baywalk Plaza design.	PUIG, GEORGE	06/01/14	\$108,300	Y
North Bay Village	043138023.1	STORMWATER REHAB 14-03	Design - Schematic design for stormwater improvements.	RATAY, GARY	11/16/14	\$37,720	N
North Bay Village	043138024.1	WATER METER REPLACE 14-04	Design - Schematic design for water meter replacement program.	RATAY, GARY	11/16/14	\$46,050	N
North Bay Village	043138025.1	WATER MAIN REHAB 14-05	Design - Schematic design for water main replacement program.	RATAY, GARY	11/16/14	\$35,020	N
North Bay Village	043138026.1	SANITARY SEWER REHAB 14-06	Design - Schematic design for sanitary sewer replacement program.	RATAY, GARY	11/16/14	\$44,690	N
North Bay Village	043138027.1	SANITARY SEWER REHAB 15-01	Report - Facilities Plan to obtain State Revolving Funds for sanitary sewer work.	RATAY, GARY	01/16/15	\$7,900	N
North Bay Village	043138028.1	STORMWATER OUTFALL 15-02	Report - Facilities Plan for potential funding associated with stormwater work.	RATAY, GARY	02/01/15	\$8,810	N
North Bay Village	043138029.1	WATER MAIN REHAB 15-03	Report - Facilities Plan to obtain State Revolving Funds for water main work.	RATAY, GARY	01/16/15	\$6,180	N
North Bay Village	043138030.1	WATER METER REPLACE 15-04	Report - Facilities Plan to obtain State Revolving Funds for water meter work.	RATAY, GARY	01/16/15	\$5,880	N
North Bay Village	043138031.1	2014 SSES UPDATE 15-03	Report - 2014 SSES report for submittal to DERM.	RATAY, GARY	01/16/15	\$2,250	N
North Bay Village	043138032.1	SS REHAB PROGRAM CPS	Construction Phase Services/Program Management - Sanitary Sewer Rehabilitation Program.	RATAY, GARY	02/01/16	\$509,400	Y
North Bay Village	043138033.1	N BAY ISL STMWTR FEAS	Study - Evaluate the feasibility of stormwater system improvements without the use of injection wells on North Bay Island.	RATAY, GARY	03/01/17	\$21,000	N
North Bay Village	043138034.1	WM REHAB PROGRAM CPS	Construction Phase Services/Program Management - Water Main Rehabilitation Program.	RATAY, GARY	04/04/17	\$307,200	Y
North Bay Village	043138035.1	WATER METER REPLACE CPS	Construction Phase Services/Program Management - Water Meter Replacement Program.	RATAY, GARY	05/16/17	\$313,700	Y
North Bay Village	043138036.1	FORCE MAIN GIS 17-06	GIS Services - Develop GIS files for the 16-inch force main for coordination and submittal to DRER.	RATAY, GARY	06/16/17	\$15,900	N
North Bay Village	043138037.1	2017 SSES REPORT	Report - 2017 SSES report for submittal to DERM.	RATAY, GARY	06/16/17	\$4,900	N
North Bay Village	043138038.1	WW PS IMPROV 17-05	Design - Design to install macerators at main wastewater pump station.	RATAY, GARY	07/16/17	\$46,600	Y
North Bay Village	043138039.1	SAN SEWER GIS 17-08	GIS Services - Develop GIS files for the sanitary sewer system for coordination and submittal to DRER.	RATAY, GARY	10/16/17	\$28,200	Y
North Bay Village	043138040.1	STORMWATER OUTFALL CPS 17-09	Construction Phase Services/Program Management - Stormwater Outfall Rehabilitation Program.	RATAY, GARY	11/16/17	\$88,400	Y
					Total	\$1,708,800	