



REPORT OF THE PUBLIC WORKS COMMITTEE MEETING HELD ON AUGUST 11, 2022

I. CALL TO ORDER AND ROLL CALL

The Public Works Committee Meeting of August 11, 2022 was called to order by Chair Bobbie Lindsay at 9:30 a.m. On roll call, all committee members were found to be present.

II. PLEDGE OF ALLEGIANCE

Chair Lindsay led the Pledge of Allegiance.

III. APPROVAL OF AGENDA

Motion was made by Committee Member Margaret Zeidman and seconded by Chair Lindsay to approve the Agenda. On roll call, the Motion passed unanimously.

IV. COMMUNICATIONS FROM CITIZENS – 3 MINUTE LIMIT PLEASE

V. REGULAR AGENDA

A. Old Business – *None*

B. New Business

1. Water Supply Feasibility Study: *H. Paul Brazil, P.E., Director of Public Works*

Jason Debrincat, Public Works Senior Project Engineer reported that after last month's update regarding the water feasibility study to the Town Council from Public Works and Kimley-Horn & Assoc., the Town Council stated that it would like further information regarding the condition of the existing water supply structure, remaining asbestos concrete and cast iron pipes, renewal and replacement programs, a timeline and complexity of the options, membrane treatment, horizontal seawater wells, transmission pipeline in the intracoastal waterway and developing a Town-owned utility department.

Jason Lee, Kimley-Horn & Associates, gave a summary of the following options:

a. Age-Based Condition of Existing Water Supply Infrastructure

Mr. Lee gave an overview of the watermain, highlighting that the City of West Palm Beach owned the pipelines, but they could be transferred to the Town if the Town decided to end the Franchise Agreement. He showed a map highlighting the pipes which were installed from the 1940s, 1950s, 1960s and newer. He stated that the pipes installed before 1960 were made of either cast iron or asbestos concrete and had a life expectancy of about 70 years. Thirty-five percent (35%) of the watermain in Town are currently over 70 years or will be at the end of the Franchise Agreement.

b. Remaining Asbestos Concrete Pipe

In the northern portion of the Town asbestos concrete (AC) pipe is located at Onondaga Avenue, La Puerta Way, Adam, Eden and Garden Roads, Emerald and Coral Lanes. Patricia Strayer, Town Engineer, reported that the Onondaga Avenue pipe was replaced during the first phase of the undergrounding so there is no longer AC pipe in that location. It was pointed out that there was mislabeling on the map and it was Esplanade Way that still had AC pipe. In the central section of the Town, Pendleton Avenue, El Vedado Road, Tarpon Way, Island Drive, Via Palma and Algoma Road had AC pipes. The total AC pipe remaining is 8,900 linear feet (LF) which is 2.2% of the total 396,000 linear feet of pipe in Town.

c. Remaining Cast Iron Pipe

Mr. Lee stated that about 201,740 LF (51%) of the watermain in Town were cast iron pipe. The cast iron pipes' vulnerability is mostly due to age and has an actual service life of 70 years. Most of the pipes in Town are about 50-60 years old. Responding to Chair Lindsay, Mr. Lee and John Potts explained the differences in ductile iron and cast iron pipes.

d. Renewal and Replacement Programs

Mr. Lee stated that the current cost to replace the total pipelines (396,300 LF) in Town would be \$239M and based on a 75-year life cycle would need \$3.18M to be budgeted yearly.

Public Comments

J. Patterson Cooper, Palm Beach Civic Association, inquired if the cost of replacement was included in the water utility bills and if any conclusion could be drawn regarding failures due to age and type of the pipes. Mr. Debrincat responded that the City of West Palm Beach's analysis is based on a report of costs to repair the pipes and the water bill is based on the current agreement. H. Paul Brazil, P.E., Director of Public Works stated that in terms of failure, age plays a part but vulnerability was based on different factors. John Potts

reiterated Director Brazil's statement that vulnerability depended on certain factors and therefore the primary factor was based on age for renewal and replacement.

Mr. Lee presented a table showing the cost and years it would take to replace the pipes in Town as follows:

1940s and older	\$53.9M	17 years
1950s	\$29.3M	9 years
1960s to present	\$155.9M	49 years

e. Timeline and Complexity

Mr. Lee stated there was ongoing study regarding the current agreement with the City of West Palm Beach, membrane upgrade with the City of WPB and contracting with the City of Lake Worth Beach. He gave an overview of the cost, timelines and complexities for each alternative.

The "No Further Study" list included creating a desalination plant at Phipps Park, nano filtration at the Town-owned Quadrille site and contracting with Palm Beach County.

Chair Lindsay spoke regarding placing the current franchise agreement with the City of WPB under the "No Further Study" section. Director Brazil stated that the Town Council did not yet give direction to exclude any alternative.

f. Membrane Treatment

John Potts, Consultant, explained the membrane treatment process and the compounds removed as a result of the process. He also explained the differences in treatment of seawater, brackish water and surface water.

g. Feasibility of Horizontal Saltwater Wells

Mr. Lee explained the creation and use of the horizontal wells in the intracoastal waterway. He also spoke about the permitting and easements to be secured from Federal and State agencies (FDEP and USACE) which could take from 18-24 months. He estimated the cost to be about \$3-5M per well for a total of 11 wells. Mr. Potts pointed out that piping could not cross below private lands without an easement. Director Brazil inquired if the Town Council would like to continue with this option.

Public Comments

J. Patterson Cooper, Palm Beach Civic Association stated that oil companies carry out this kind of drilling frequently and inquired if the problem is the unknown below the intracoastal or cost. Mr. Lee responded that cost is the biggest obstacle.

Lynn George, Mockingbird Trail, spoke regarding the membrane issue.

h. Transmission Pipe in the Intracoastal

Mr. Lee spoke regarding installing transmission pipes in the intracoastal, the number of linear feet, type of drilling required, length of time for the project and cost. Director Brazil spoke about the challenges for this option. Mr. Debrincat stated that this project is relatively new to the industry.

i. Conceptual Town Utility Department Structure

Mr. Potts stated that if a utility is formed it should be a Division under the Public Works Department and would have 27 new positions in addition to the current 83 for a total of 110 positions, an estimated 30% increase in staff. He showed an org chart incorporating the new positions.

j. Discussion of Items for Future Public Works Meetings

The Phipps Park, Quadrille nano filtration and Palm Beach County should no longer be considered.

Mr. Lee showed the present day cost for a desalination treatment plant as \$140M for a life cycle of 50 years which would mean a budget of \$2.8M per year for maintenance.

VI. SCHEDULE FOR FUTURE PUBLIC WORKS COMMITTEE MEETINGS

VII. ANY OTHER MATTERS

There were none.

VIII. ADJOURNMENT

Motion was made by Member Zeidman and seconded by Chair Lindsay to adjourn the Public Works Committee meeting of August 11, 2022, at 12:30 p.m. without benefit of a roll call.

APPROVED:

Bobbie Lindsay, Chair

ATTEST:

Pat Gayle-Gordon, Acting Town Clerk

Date