Regular Workshop – October 17, 2016

Agenda Item 8

Agenda Item: Canal Dredging Feasibility Study Update

Presenter: Town Manager and staff

Summary: The Town performed its first ever canal dredging project in 2003. In 2013, the Public Works Department performed manual soundings of approximately 40 canals throughout the Town. The results of that survey were presented to the Town Commission at the December 11, 2013 Workshop. The Town Commission then directed staff to initiate a more detailed survey and perform a full canal feasibility study of all Town canals.

Taylor Engineering (Jacksonville and Sarasota, FL) was engaged to perform the feasibility study that, among other things, included additional reconnaissance surveys, planning level dredging volumes and associated preliminary opinions of probable costs and potential funding options. Taylor Engineering will present interim findings at the October 17, 2016 Regular Workshop Meeting.

Attachments: 10-07-16 Memo, Public Works Director to Manager;  
Taylor Engineering, Inc. Canal Feasibility Study.

Recommended

Action: Pending discussion, provide direction to Manager.

Memorandum

Date: October 10, 2016

TO: Dave Bullock, Town Manager

FROM: Juan Florensa, Public Works Director

SUBJECT: Canal Feasibility Study Update

The Town of Longboat Key is defined by its coastline. While the Gulf of Mexico waters that lap Town’s shoreline are enjoyed by many visitors and residents, the Town’s saltwater canal area is also an important component of the Town’s coastal system. All of these canals are located along the eastern side of the Key and can be accessed from Sarasota Bay.

Some of the canals were excavated (dredged) by developers as the Town was built. The canals provided an attractive selling/marketing feature for new homes and condominiums. Over the last four decades the canals slowly silted in shoaling to the point of becoming difficult to navigate especially at low tide.

In 2003, the Town performed its first ever canal dredging project. Thirty canals were dredged. Approximately 23,000 cubic yards of material was excavated and disposed of. The construction cost was $1.5 million. Dredging began in March 2003 and was completed in December 2003. The project was funded from the Town’s General Fund (Ad Valorem), Infrastructure Surtax, and West Coast Inland Navigation District (WCIND) grants.

In 2013, the Public Works Department performed manual depth soundings of approximately 40 canals throughout the Town. The recorded depths were corrected to daily tide elevation. The results of that survey were presented to the Town Commission at the December 11, 2013 Regular Workshop Meeting. The survey confirmed there was generally good depth for navigation but certain areas had increased rates of shoaling. These specific areas were concentrated at the mouth of the canals or near stormwater drainage pipe outfalls.

The Town Commission directed staff to initiate a more detailed survey and perform a full feasibility study of all Town canals. In 2013, Taylor Engineering (Jacksonville and Sarasota, FL) was engaged to perform the feasibility study. Among the tasks Taylor was requested to perform were more detailed surveys, provide planning level dredging volumes and associated preliminary opinions of probable costs. Taylor was also asked to investigate funding options for canal dredging.

Taylor estimates that as much as 95,000 cubic yards of material will eventually need to be excavated at the current rate of shoaling to restore all canals to the State-permitted depths. Planning level construction cost estimate range is about $2.5 million to $6 million depending on the extent and timing of the work.

We currently have a fund balance of $517,399 in the canal dredging fund and another $700,000 available in the Infrastructure Surtax which competes with the cash balance available in the IST Fund for a total of $1,217,399.

If the Commission desires to move forward, staff has identified the following next steps and proposed timeline:

* FY 2016-2017 – Complete formal Bathymetric Survey of canals, prepare design and permitting documents; submit to Florida Department of Environmental Protection (FDEP) and US Army Corps of Engineers (USACE) for review and approval.
* FY 2017-2018 – Obtain permits from regulatory agencies. Formalize and enact the required legislation if all or part of the funding will be through special taxing district or other forms other than ad-valorem.
* FY 2018-2019 – Begin construction.

Taylor Engineering staff will be present at the October 17, 2016 Regular Workshop Meeting to review in detail the work performed to date. The attached PowerPoint presentation will be discussed as well.

Please contact me if you have any questions or require additional information.