



Legislation Details (With Text)

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Title: Update on Storm Water Flooding Issues

PURPOSE: The purpose of this item is to provide the Board of Aldermen an update on various storm water flooding issues since the last report on February 11, 2014.

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TITLE:

Update on Storm Water Flooding Issues

PURPOSE: The purpose of this item is to provide the Board of Aldermen an update on various storm water flooding issues since the last report on February 11, 2014.

DEPARTMENT: Public Works Department

CONTACT INFORMATION: George Seiz, Director of Public Works, 918-7427

INFORMATION:

At the regular Board of Aldermen meeting on February 11, 2014, town staff provided a report about storm waste design standards and possible future considerations related to those standards. Included in the report was a summary and update of various storm water problem areas. As part of the discussion on February 11, the BOA requested staff to provide periodic updates on efforts to address these problem locations.

The Public Works Department has been in contact with Town Engineer Henry Wells who has estimated costs for further evaluation of the these problem areas. The estimates and new information are included below in the summaries for each location. New information is shown in *italics*. After evaluations of the locations are completed, staff will make recommendations for the Capital Improvement Plan

- **Tom's Creek (2-11-14)** - Following the suggestion of one of the neighbors along Tom's Creek, Town staff set up a series of meetings to go door to door and ask homeowners what problems they have and here about concerns and suggestions. There were 5 neighborhood meetings held from mid-July to early August and 16 out of 39 property owners came to the meetings and helped to answer questions on survey sheets. More evaluation is needed.

Most technical information is already available. Will need to prepare mapping to explain impacts to properties - \$4,000 to \$5,000

- **105 Morningside Drive (2-11-14)** - yard flooding, water overtops the road, request to enlarge culvert. Staff has visited with the adjacent resident and discussed possible options. Preliminary analysis indicates that enlarging the culvert under Morningside will likely cause negative impacts downstream. Replacing sections of curb and/or installing some storm inlets may help mitigate the problem.

Possibly increase culvert size or add additional culvert, but must determine impacts downstream. More analysis to see if culvert can be enlarged and prepare construction cost estimate. - \$2,500 to \$4,000

- **400 Block of Broad St. (2-11-14)** - water overtopped road on June 30th, public road damage and private property damage. petition received, request to enlarge culvert. An emergency repair was made at this location costing about \$10,000. Preliminary review indicates the culvert would need to be enlarged from an 18" to 48" to meet current standards. Potential downstream impacts need to be reviewed as well as other possible options. Cost estimates for options need to be determined and programming in the CIP considered.

Some analysis already completed. Further review and prepare construction cost estimate - \$1,000 to \$1,500

- **Old Pittsboro Road (2-11-14)** - concerns expressed about storm water run-off, sewage in the drainage ditch, sitting water. Staff is still in the early stages of evaluating the storm water run-off issues. Ideas suggested such as widening the drainage ditch or piping the storm water could possibly be considered. OWASA made a repair last summer to address sewage backing into a storm junction box. As a follow up to that repair OWASA also did some public education outreach to citizens and businesses about the detriments of putting fats, oils and grease in sanitary sewers as requested by the BOA.

Need to determine if under DENR or Corps of Engineers jurisdiction. Agencies may not let us do anything. Further evaluation - \$5,000 to \$7,000

- **1020 West Main Street** - Private storm sewer on adjacent church property backs up in heavy rains and threatens crawl space and HVAC units of private property. Dillard St., High St. and Goldston Dr. drain to this area. Possible drainage study to evaluate existing storm sewer system. - Study - \$2,000 - \$4,000.

- **Tributary to Morgan Creek adjacent to Public Works (2-11-14)** - While clearing scrub trees this winter adjacent to the culvert pipes under Public Works Drive, Public Works staff has discovered significant erosion of the stream bank adjacent to the Public Works property. Appears to be a result from June 30, 2013 storm event. Location is still being evaluated to determine extent of repair work needed. Cost estimate for repair needs to be determined and programming in the CIP considered. A temporary more immediate repair may be necessary.

Sungate Design is working with another consultant to get a preliminary cost estimate for engineering and construction. Close proximity to NCDOT storm water culvert may require coordination with NCDOT. Further evaluation and prepare cost estimate - \$4,000 - \$5,000.

- **Wilson Park Multi-Use Path (2-11-14)** - Erosion along edge of path due to storm system

overloading. An emergency repair was made by the Public Works Department. Repair work seems to be holding and will continue to monitor location.

Summary of Further Evaluation Costs -

Tom's Creek	\$4,000 - \$5,000
105 Morningside Dr.	\$2,500 - \$4,000
400 Block of Broad St.	\$1,000 - \$1,500
Old Pittsboro Rd.	\$5,000 - \$7,000
1020 West Main. St.	\$2,000 - \$4,000
Tributary to Morgan Creek	\$4,000 - \$5,000

Total Range - \$18,500 - \$26,500

Tentative time line -

Complete Evaluations - June - September, 2014

Prepare Recommendations for FY 15/16 CIP - October /November, 2014

FISCAL & STAFF IMPACT: Available funds in the current fiscal year (\$6,000) will be utilized to begin the evaluation work and \$20,000 has been budgeted in FY 14/15 to continue the evaluations. PW staff will be working with the consultant during the evaluations and staff hours will also be needed for CIP recommendations. There may be significant fiscal impacts in the future depending on solutions determined to adequately address some of the problem areas.

RECOMMENDATION: It is recommended the BOA accept the report.