

Town of Windsor

Memorandum

May 10, 2016

TO: The Honorable Mayor and Town Council

FROM: Michael Stallings, Town Manager *MS*

SUBJECT: Late Item – Town Drainage

As you know, the Town Council established a drainage committee some time back. The committee has developed a priority list of drainage concerns in the Town. I have enclosed a copy of the Drainage Committee's priority list for drainage concerns in the Town.

Now that a priority list has been developed, Town Council needs to have a discussion regarding what to do with this list. Council can decide to go as far as securing easements to be able to go onto private property to address this issues, or can elect to serve a facilitator role through funding or other assistance.

Staff is currently looking into some State programs that may offer financial assistance to homeowners that elect to take corrective actions for some of the drainage issues that face Windsor.

Once Council has made a decision on how to proceed, staff will move forward in the direction given.

PRIORITIZED LIST OF PROBLEM DRAINAGE AREAS IN WINDSOR VIRGINIA

1. Priority 1 Problem Drainage Area (Shown as dark blue on the Map) This area network has four components:

A. The ditch behind the commercial area on Windsor Boulevard (includes Hardy's Towing and the Farmer's Daughter) and in the rear of several properties on Church Street is overgrown and does not function correctly.

B. There also is the major outlet line from the storm-water pond for the High School property and also drains some of the properties on Randolph Street and some of Virginia Avenue, which crosses Church Street, and through underground piping, connects to the aforementioned ditch. The underground piping is collapsing in places causing ponding in the rear of properties. These collapses are exacerbated by the malfunctioning ditch.

C. Stemming off from this ditch (Item A), the water flows down the new ditches that were installed on Holland Drive, then the system flows into the ditch that leads under Windsor Boulevard and into the pond on Mr. Alphin's property.

D. Also a part of this system are the other "new" ditches along Holland Drive that have standing water problems. This is caused by the underground piping leading to Windsor Boulevard on the edge of the Town's property that is either stopped up, collapsed or inadequate in size to carry the water to the ditches on Windsor Boulevard which lead back to the aforementioned pond. A related component is along Roberts Avenue where the connection from Holland Avenue and along Roberts Avenue, the ditch is sometimes clogged and was put in incorrectly (VDOT has attempted to remedy some of these situations). However, this location has caused some of the flooding problems on some of the businesses on Windsor Boulevard (NAPA).

2. Priority 2 Problem Drainage Area (Shown in red on the Map) This area is made up of two components.

A. The first of these is at the intersection itself. Windsor Boulevard at its junction with Church, Court and Bank Streets does not appear to carry the water well within its ditch system. The channels may be inadequate. The study area was discussed to be 50 feet on all of the intersection streets

B. A similar situation is found further east of the intersection on Windsor Boulevard where the storm-water from Windsor Boulevard has come over the rather short curb and sidewalk area and flooded businesses. There also is a second sidewalk in these areas on private property that are sloped slightly towards the buildings.

3. Priority 3 Problem Drainage Area (Shown in green on the Map). This drainage problem area is the one of the few areas not affected directly by U.S. Route 460. It is affected somewhat by its proximity to the Norfolk Southern Railroad. It encompasses much of Bank Street, Maple Lane, Griffin Street and where Griffin Street becomes Old Suffolk Road. It has two primary trouble-spots.

A. The houses along Bank and to a lesser degree on Griffin Street have had the very shallow ditches in front of their homes be overwhelmed and their driveways and front-yards have had some flooding. VDOT this past spring repaved the area and found that a drop inlet on Bank Street had been paved over. It still appears that the ditches are inadequate channels or that the piped or now overgrown ditches that are to remove the water on private property perpendicular to Bank Street to the "wet" areas or vacant fields are not effective or efficient in the removal of the storm-water.

B. The houses along Griffin Street have had less of the problem described in Item A. However where Griffin Street becomes Old Suffolk Road, after the sharp turn there is a major ditch perpendicular to Old Suffolk Road that drains the farm lands on the south of Old Suffolk across a resident's property to the Norfolk Southern Railway ditches. On the resident's property, the piped ditch has developed some sink holes and it has caved in causing some flooding. Some of the problem has been ameliorated by Norfolk Southern and VDOT cleaning their respective ditches and in-falls and outfalls.

4. Priority 4 Problem Drainage Area (Shown in orange purple on the Map). This drainage problem is caused by storm-water on the north side of U.S. Route 460 that is channeled by largely underground pipelines from either Watson Street or across Community Electric Cooperative's property.

A. There has been some sink-holes and ponding along the properties on Watson Street and CEC's land. The water tends to flow off the adjacent properties to the north from a ditch on the mobile home park's property whose connection to VDOT's ditches does not mesh well. This causes some ponding at the rear of Watson Street.

B. The storm-water from the aforementioned ditches flow under U.S. Route 460 and actually are intended to flow across the commercial properties there and then flow parallel to the Norfolk Southern Railroad to the west past U.S. Route 258 to the edge of Town there it goes under the railroad. There has been a major clog in this system somewhere in the line parallel to the railroad which has caused problems along its length. Staff has gotten VDOT and Norfolk Southern to look into the matter and correct it. Because of the machinery required for the repair this has not been completed as of this writing.

5. Priority 5 Problem Drainage Area (Shown in purple on the Map). This drainage problem area is not a part of either the U.S. Route 460 or the Norfolk Southern Railroad. These are on North Court Street and the north edge of the properties on Virginia Avenue with lateral leading across Virginia Avenue guiding the flow to both the north and the south.

A. There is a piped ditch with several drop inlets at the rear of the properties running parallel to the north side of Virginia Avenue. Apparently, a portion of it takes storm-water from the field and subdivision to the "wet" school properties running at the end of Virginia Avenue, with the other portion taking the water to North Court Street. In places the pipes have deteriorated causing small sink holes in yards and some small ponding mainly in the areas leading to North Court and some of the underground piping from North Court. There also are underground pipes and drop inlets that remove flow into the High School properties' storm-water system. Some of these also have had sink-holes develop. At the piped ditches outfall on North Court Street, some recent work that was done may have corrected some of the problems in this area.

B. Along North Court Street, there have been problems with the underground pipes under the street collapsing and backing up water on the residential properties. There also are underground pipes on private properties that are collapsing causing numerous small sink holes and minor ponding. These connect into the Street's system. Many of these problems were exacerbated by the repaving work that was performed last year that utilized the "milling process" which causes more vibration. VDOT has been notified numerous times and has done some repair work on this street several times recently.

6. Priority 6 Problem Drainage Area (Shown in light blue on the Map). There is a ditch running parallel to Sarahnell Lane on the west side. It carries much of the storm-water flow from the High School's property towards and under Shiloh Drive towards U.S. Route 460. There have been some minor sink-holes develop along the properties (in the subdivision) with the inevitable ponding and sinkholes and scouring at the outfall and within the ditch along Shiloh. However, VDOT has largely remedied the problem on their right of way. However, the problems remain on the private properties