# SUSSEX CONSERVATION DISTRICT PRIVATE DRAINAGE PROGRAM

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Sussex Conservation District

Project Manager

### PURPOSE:

- ▶ To alleviate drainage problems occurring in Sussex County
- Provide assistance to property owners, HOAs, public and private entities needing to address serious drainage issues.
- Assist in design and implementation of BMPs to solve various drainage issues.

#### WHO IS ELIGIBLE?

- ▶ Individuals
- Homeowner's Associations
- Municipalities
- ► Financial Assistance and Cost Share Funds may be available for eligible projects. Funds are used for design, construction and or repair costs.
- Projects located within the DelDOT right-of-way are not eligible.

#### COMMON DRAINAGE ISSUES

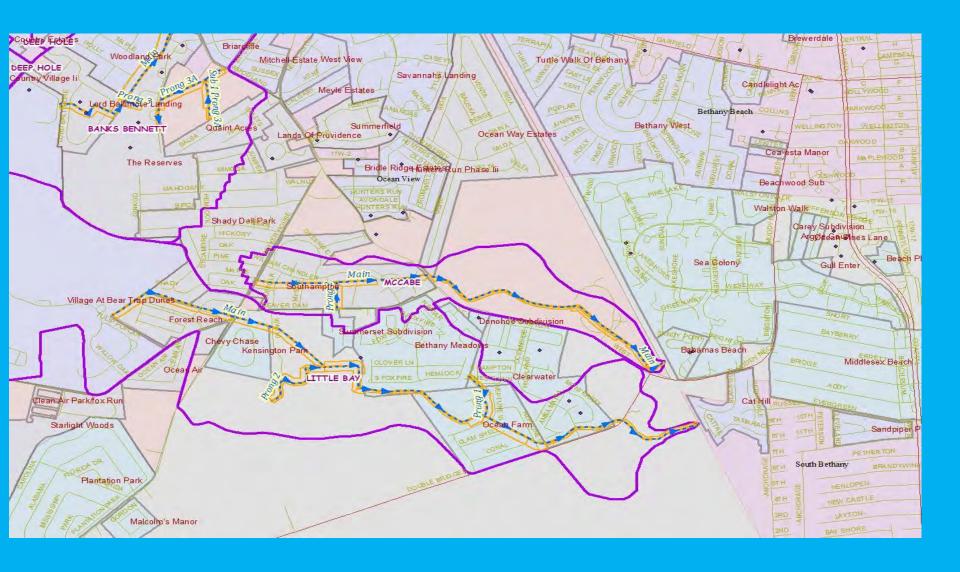
- Sinkholes Failing drainage pipes
- 3 types of pipes commonly used in sub-divisions are RCP (reinforced concrete pipes), Corrugated metal pipes (galvanized or aluminum), and HDPE pipes (High-Density Polyethylene).
- Concrete pipes usually fail at the joints most cases can be easily fixed by pathing joint failures
- Metal pipes have a life span, usually within 20-30 years depending on environmental factors. Typically failed metal pipes need to be replaced.
- ► HDPE pipe (plastic) last a long time. HDPE pipe failures are typically due to installer error.

## COMMON DRAINAGE ISSUES - CONTINUED

- ► Standing water
- ► Water standing over 72 hours after normal rain event (1 inch or less)
- Caused by poor grading, poor soils, and/or inadequate drainage system.
- Typically can be corrected by regrading, installing infiltration systems, or conveying water via catch basins/pipes.

## COMMON DRAINAGE ISSUES - CONTINUED

- Erosion and Embankment Stabilization
- Caused by surface runoff, channelized water flow, inadequate embankment protection (stone or vegetation).
- Can be corrected by installing proper embankment protection.
- Rip Rap (large stone) with proper underlayment fabric.
- Vegetation stabilization (using plants to hold soils in place).
- ► Bio-degradable products (coconut bio-logs, filter socks, matting, etc.)



#### TAX DITCHES

#### WHAT ARE TAX DITCHES

- Tax Ditches are maintained by Tax Ditch Organizations (Property owners within the Tax Ditch Watershed)
- Landowners within the Tax Ditch
  Watershed contribute money (from
  their taxes) to provide budgets for Tax
  Ditch maintenance. Amount of money
  contributed is based on location and
  size of property.
- Tax Ditch Organizations can receive
   Cost Share money from the State and
   County to assist with maintenance costs

#### TAX DITCHES CONTINUED

- All Tax Ditches have maintenance righta-ways (sizes vary)
- These Right-a-Ways can extend into private or HOA property and should be kept free of obstacles (fences, sheds, gardens, decks, trees, etc.)

#### HOW TO IDENTIFY TAX DITCHES

- DNREC online Tax Ditch Map
- www.dnrec.delaware.gov/swc/Pages/Drainag eTaxDitchWaterMgt.aspx
- https://www.arcgis.com/apps/webappviewer/i ndex.html?id=8a2a0588b1604d38b878367ceb1 89370
- Contact DNREC Drainage Section Melissa Hubert
  melissa.hubert@delaware.gov

## DRAINAGE ISSUES IN TAX DITCHES

- ▶ Please contact Jason Strauss with SCD
- > 302.396.7620
- ▶ jason.strauss@sussexconservation.org





## PROJECTS





















#### MILL POND







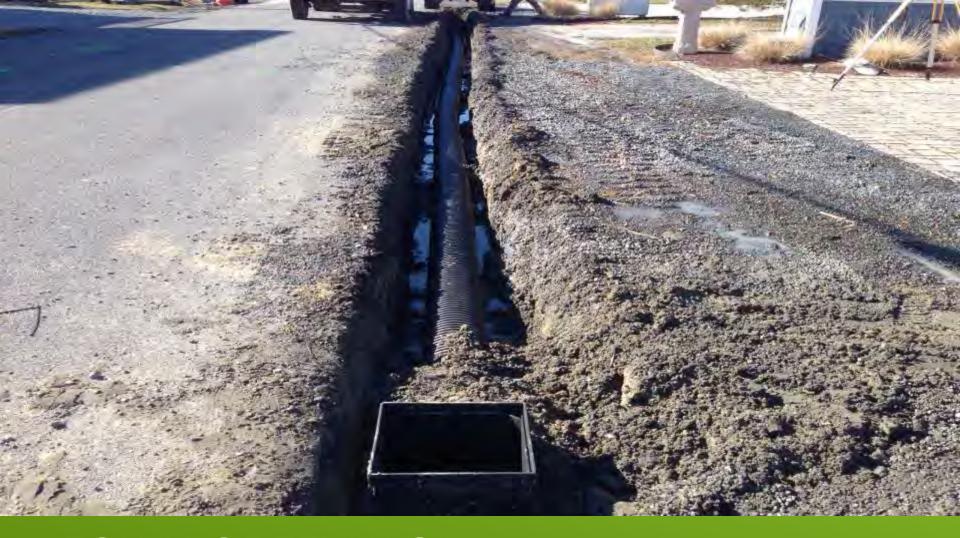












TOWN OF FENWICK













WOODS ON HERRING CREEK













PRIVATE LANDOWNER









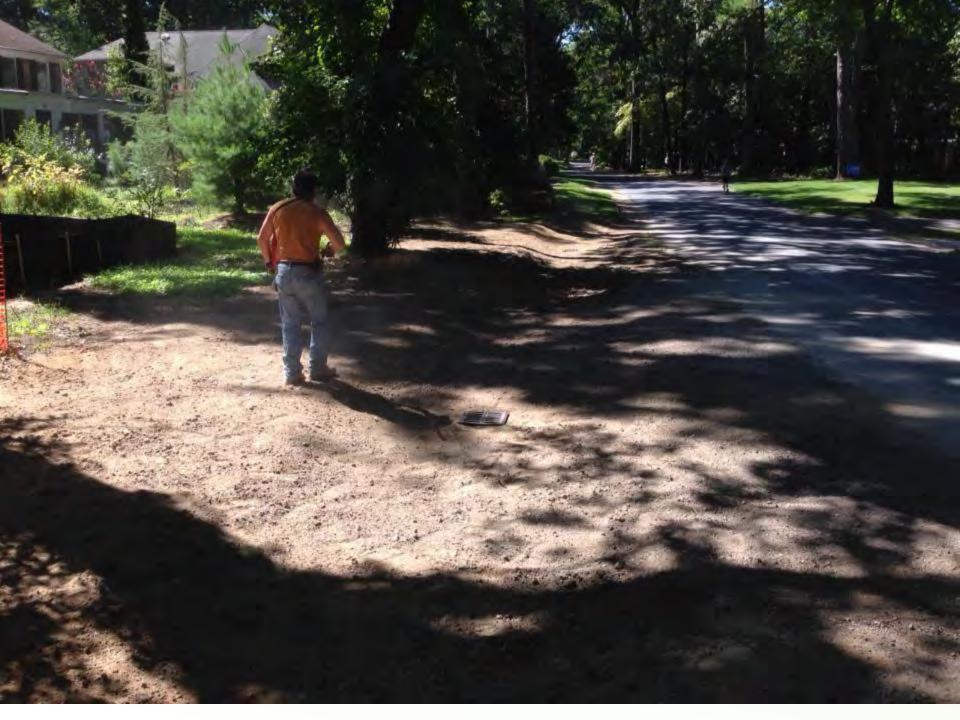
ALTERNATIVE DRAINAGE SYSTEMS

















































## CONTACT

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