



# Town of Esopus

Stormwater Plan Review 2019-2020

# 2019

## What We've Done

### ▶ ORGANIZATION

- ▶ Completion of Tighe & Bond Stormwater Assessment  
Available online at [bit.ly/Esopus-Stormwater-Study](https://bit.ly/Esopus-Stormwater-Study) or Esopus.com
- ▶ Planning for 2020 Repairs & Maintenance

### ▶ REPAIRS & MAINTENANCE (some done 2018-2019)

- ▶ Millbrook Dr/Andorn Ln - Pipe Upgrade
- ▶ Valley Rd - Pipe Replacements (per Stormwater Assessment)
- ▶ Swartekill Rd - Cross-Pipe Replacements (2 miles), Concrete to Steel Pipe upgrade
- ▶ Floyd Ackert Rd - Pipe Replacement, Concrete to Steel
- ▶ Maple, Cedar, Pine St - new basins, replacement of all systems
- ▶ Cow Hough Rd - Pipe Replacements (whole road)
- ▶ Hudson Ln - Swale repair

# 2020

## What We're Doing

- ▶ Based on Tighe & Bond Stormwater Assessment
- ▶ **1.) Primary Areas:**
  - ▶ Sentar Lane
  - ▶ Lindorf Street
  - ▶ Clay Road
- ▶ **2.) Tilden Street**
  - ▶ pipe investigation via camera
- ▶ **3.) Emergency repairs as-needed**
  - ▶ May affect budget



# 3 Primary Areas

## Why?

- ▶ All 3 sites determined as priority flooding areas in Esopus through Stormwater Assessment
- ▶ Recommended repairs affect the most residents, work on largest problems before moving to smaller ones
- ▶ Plans already developed through Stormwater assessment - ready to implement in Spring 2020 after collecting easements

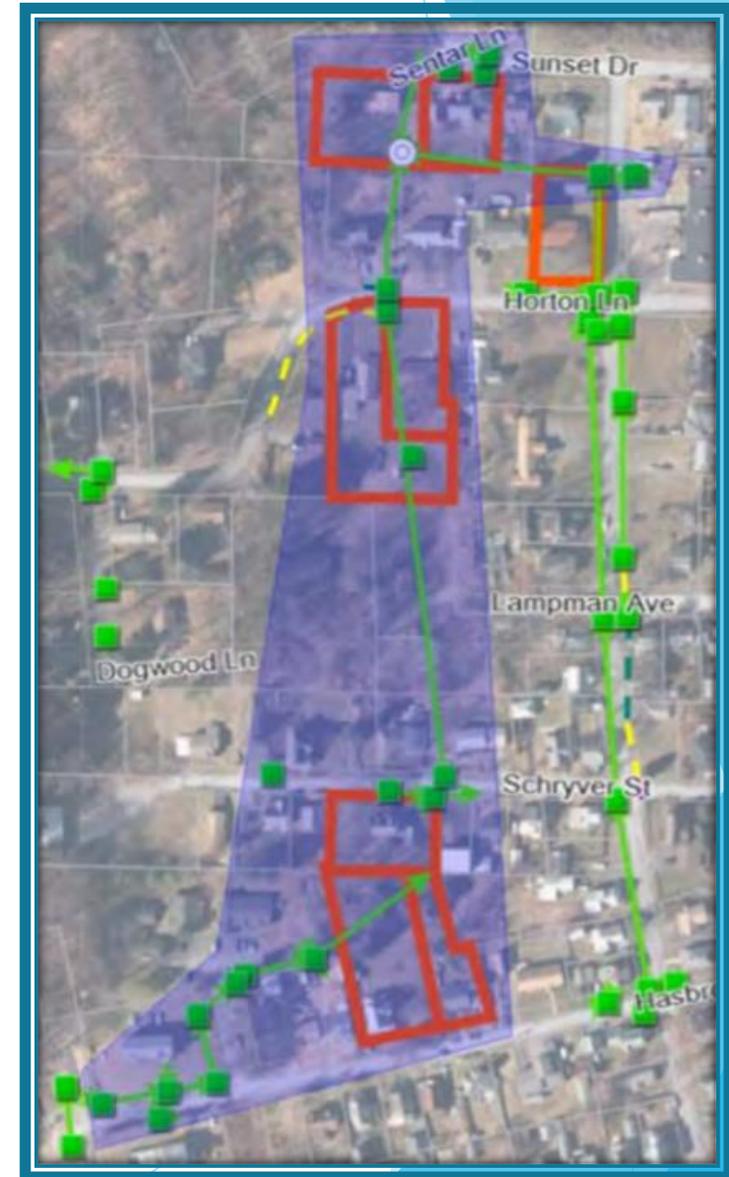
# Sentar Lane

## ▶ Issue:

- ▶ Undersized pipes
- ▶ Catch basins cannot handle water volume

## ▶ Solution:

- ▶ Replacement/upgrades
  - ▶ 2,200 ft of pipe
  - ▶ 11 catch basins
  - ▶ 1 manhole



# Lindorf Street

## ▶ Issue:

- ▶ Undersized pipes
- ▶ Catch basins cannot handle water volume

## ▶ Solution:

- ▶ Replacement/upgrades
  - ▶ 750 ft of pipe
  - ▶ 8 catch basins



# Clay Road

## ▶ Issue:

- ▶ Undersized pipes
- ▶ Catch basins cannot handle water volume
- ▶ Natural drainage pattern insufficient

## ▶ Solution:

- ▶ Replacement/upgrades
  - ▶ 200 ft of pipe
  - ▶ 1 catch basin
  - ▶ 1 manhole
- ▶ Installations
  - ▶ 1 vegetated bioswale



# Tilden Street

## ▶ Issue:

- ▶ Potentially undersized pipes
- ▶ Catch basins can't handle water volume
- ▶ Swale insufficient

## ▶ Solution:

- ▶ Needs further investigation
  - ▶ CCTV Pipes to verify current condition



# 2020 Timeline

## ▶ WINTER 2019-2020

- ▶ Potential roadwork limited by weather/moratoriums
- ▶ Acquire easements from affected residents
- ▶ Develop repair plans

## ▶ SPRING 2020

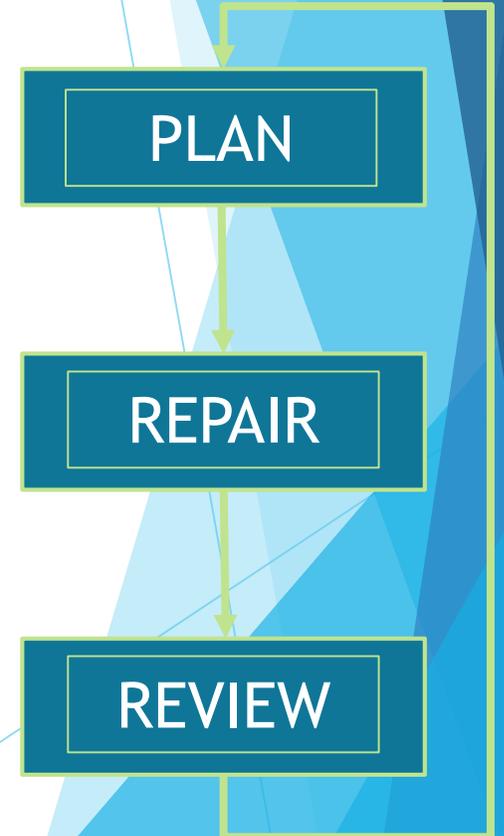
- ▶ Repairs begin for stormwater drainage, CHIPS repaving
- ▶ Focus on priority areas, bottom-up. Other repairs as needed

## ▶ FALL 2020

- ▶ Review spring progress based on goals
- ▶ Re-establish budget
- ▶ Refocus priority areas

## ▶ WINTER 2020-2021

- ▶ Acquire easements from affected residents
- ▶ Develop repair plans



# Repair Strategy

Considering Tomorrow, Today

## ▶ Work From Bottom-Up

- ▶ When replacing pipes with larger ones, replacements must be done from the exit of pipe upwards. Otherwise, water will still be bottlenecked further down the pipeline.

## ▶ Track & Map Replacements

- ▶ Even brand-new components have a lifespan. Using GIS, we keep track of what was replaced and when in order to predict upcoming system failures 50+ years down the line.

## ▶ Passive Replacement Strategy

- ▶ For non-priority roads.

# Passive Replacement Strategy

## Making the Most of Routine Maintenance

### ▶ How It Works

- ▶ Highway gets funding through Town budget and through NYSDOT via CHIPS
  - ▶ CHIPS not eligible for drainage repairs
  - ▶ CHIPS money goes to repaving

### ▶ How We Save Money

- ▶ When Town roads are repaved, we also replace/fix drainage at that time.
- ▶ Saves on labor (no need to dig up again) and overhead (nor repave twice).

# Potential Hurdles

## ▶ Easements

- ▶ Town needs permission to do any work on a resident's property
- ▶ If recommended repairs encroach on a property and the owner does not wish to sign an easement, an alternative repair must be developed around them. Takes additional time & money

## ▶ Weather

- ▶ Bad storms, or freezing conditions can postpone work

## ▶ Budget

- ▶ Repairs cannot proceed beyond what's financially possible for 2020

# Step One: Easements

- ▶ **Are you willing to have the Town of Esopus do work on your property in order to repair the greater drainage system?**
  - ▶ Town is required to leave property in the same condition it was in before work started - no need to worry about damages
  - ▶ Remember - improvements to drainage can help slow degradation of property assets
- ▶ **Do you currently have an Easement with the Town?**
  - ▶ Inquire with Building Department

**SOME EASEMENTS STILL NEEDED FOR RESIDENTS OF  
SENTAR LANE**

email [outreach@esopus.com](mailto:outreach@esopus.com) with any questions



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