

# Pine Island Lake Drain (#196)

## Board of Determination

February 21, 2019

**Kalamazoo County Drain Commissioner**

**Patricia A.S. Crowley, PhD (Drain Commissioner)**

**Jeffrey D. VanBelle (Deputy Drain Commissioner)**



# Presentation Overview

- Why Are We Here?
- Drain Overview / History
- Drainage Issues
- Potential Improvements
- What Happens Next?

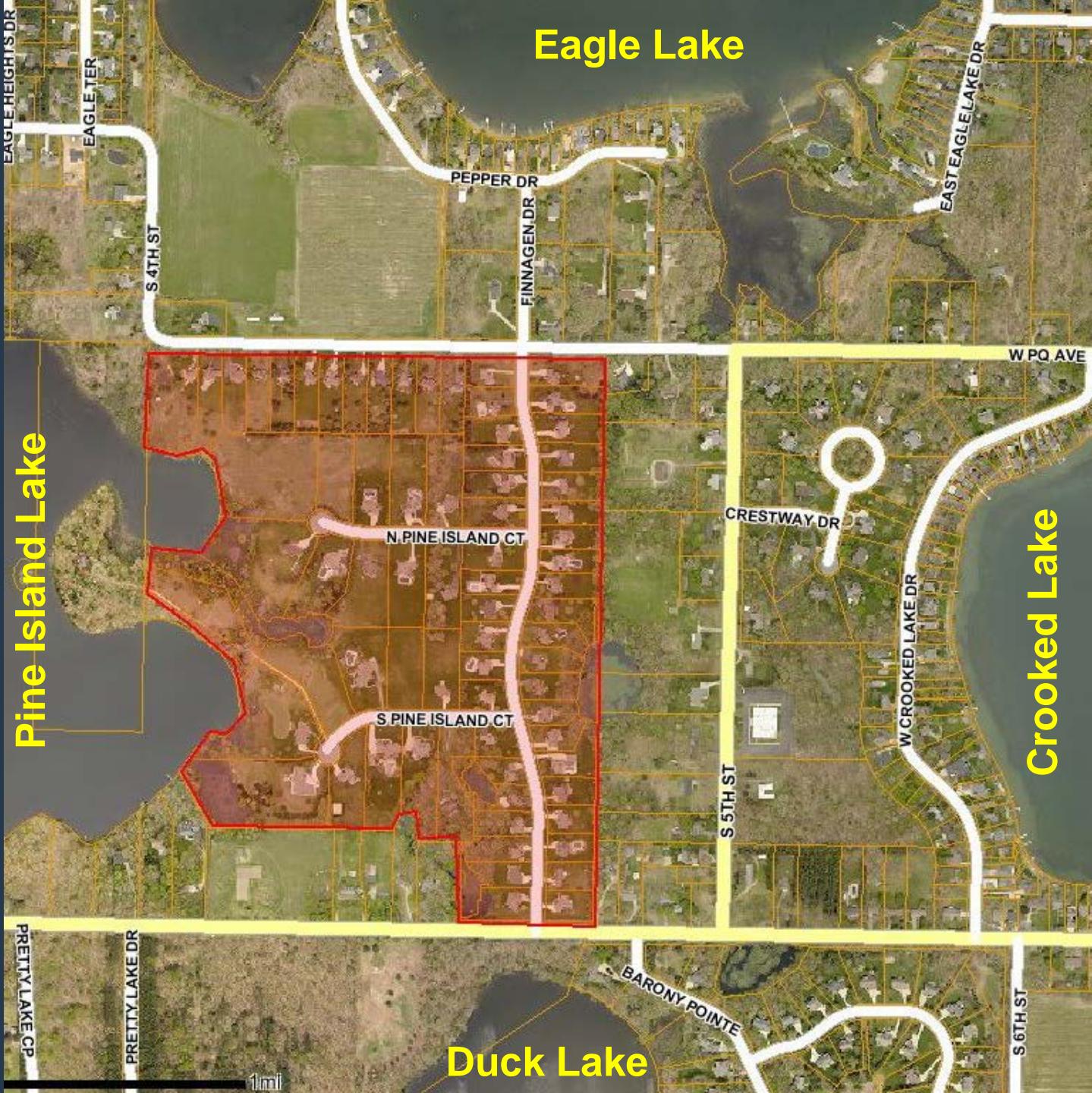
# Why Are We Here?

- Kalamazoo County Drain Commissioner (KCDC) received a petition from 29 freeholders of land dated July 29, 2018 for the maintenance and improvement of the Pine Island Lake Drain.
- Michigan Drain Code Act 40 of 1956, as amended, mandates that as part of the petition process, the Drain Commissioner must schedule and hold a Board of Determination (BOD).
- BOD will hear all testimony and determine if a project is necessary based on public health, welfare or convenience.



# Drain Overview

- Pine Island Lake Plat is located in Section 16, Township 3 South, Range 12 West, Texas Township.
- Pine Island Lake Drainage District



# Drain Overview

- Pine Island Lake Plat consists of 12 lots and 1 Infiltration Basin.
- Pine Island Lake was established under section 433 of the Michigan Drain Code Act 40 of 1956, as amended, in 1993.
- The Infiltration Basin and inlet pipe are under the jurisdiction of the KCDC.
- All storm sewer in the road is under the jurisdiction of the Road Commission.



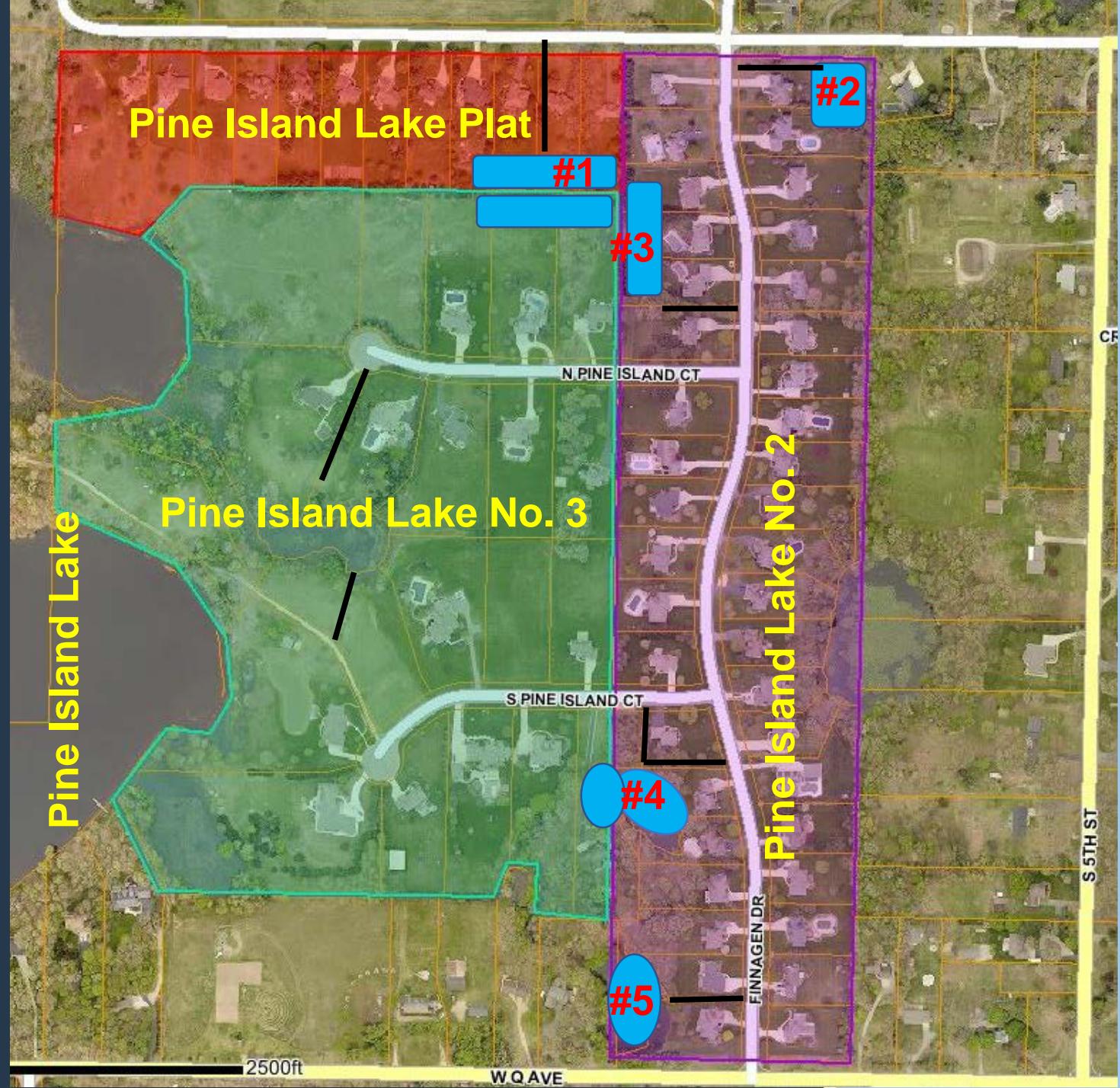
# Drain Overview

- Pine Island Lake No. 2 consists of 40 lots, 2 infiltration basins and 2 unnamed ponds.
- The 433 was enlarged to include Pine Island Lake No. 2 in 1994.
- The Infiltration Basins, ponds and inlet pipes are under the jurisdiction of the KCDC.
- All storm sewer in the road is under the jurisdiction of the Road Commission.



# Drain Overview

- Pine Island Lake 3 consists of 20 lots, 2 infiltration areas and 2 outlets to Pine Island Lake.
- The 433 was enlarged again to include Pine Island Lake No.3 in 1995.
- The Infiltration Basins and outlets to Pine Island Lake are under the jurisdiction of the KCDC.
- All storm sewer in the road is under the jurisdiction of the Road Commission.



# Drainage Issues

- High Groundwater
  - No outlet for Infiltration Basins
  - Flooding of Houses and Yards
  - Pumping to Road Right-of-Way



# Drainage Issues



Flooded Infiltration Basin / No Outlet



Flooded House & Yard



# Drainage Issues



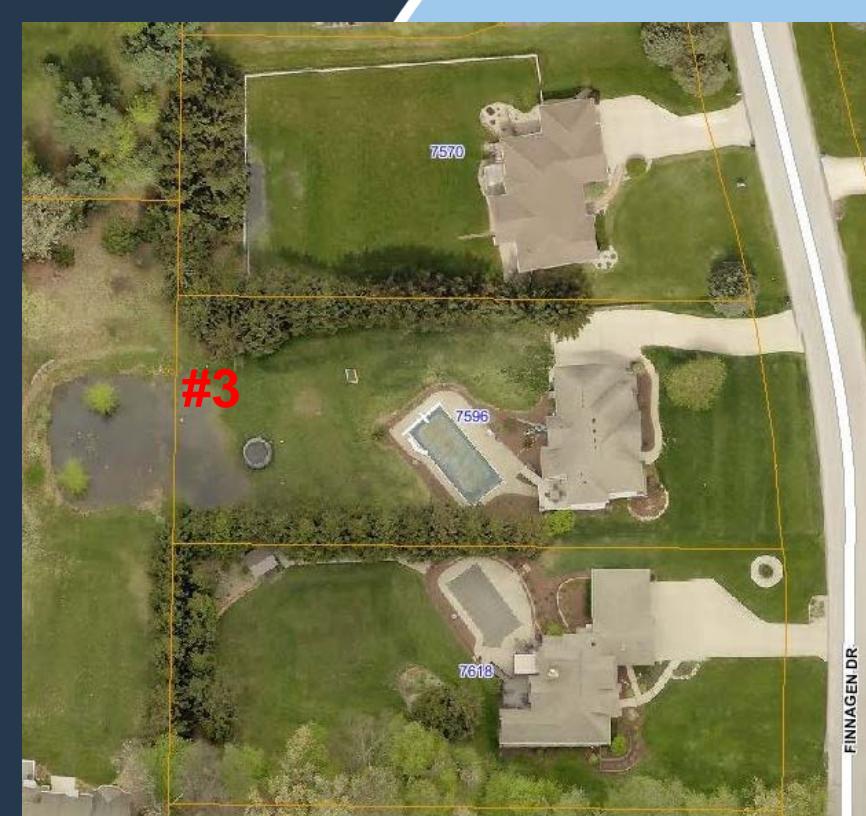
Flooded Infiltration Basin / No Outlet



Pumping to Road Right-of-Way



Flooded Shed & Yard

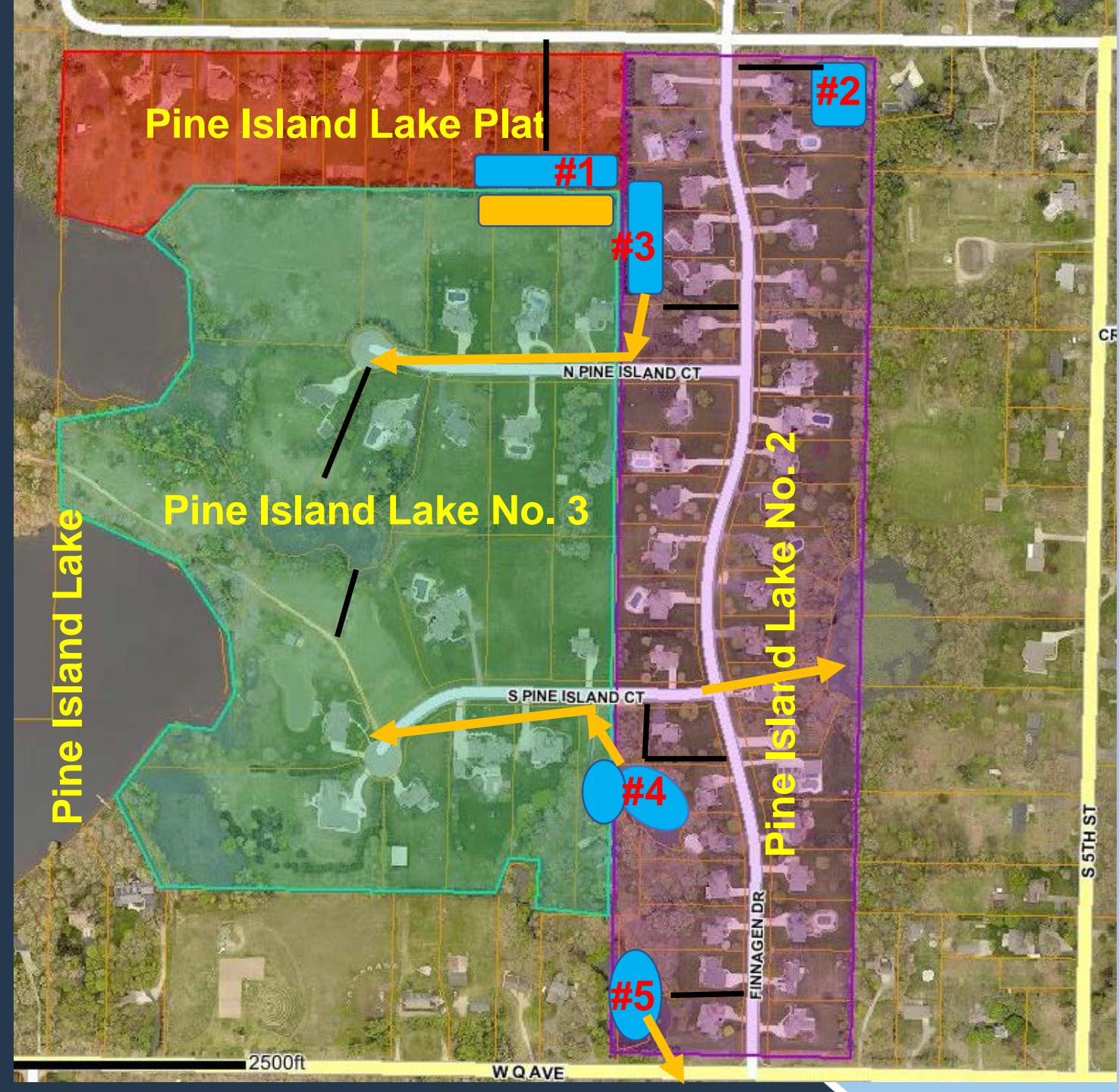


# Drainage Issues



# Potential Improvements

- Provide Outlets for Infiltration Basins
- Re-direct Storm Sewer
- Enlarge Infiltration Basins



# What Happens Next?

- Open floor to public testimony (written and oral).
- BOD to decide if petition is necessary:
  - If the BOD finds that the petition is not necessary, the project ceases immediately and no petition can be heard for the same project until 12 months have passed.

# What Happens Next?

- If the BOD finds that the petition is necessary based on health, welfare or convenience, the Drain Commissioner proceeds with a project. Each project is unique, however, in accordance with the Drain Code, the following tasks must be completed:
  1. Complete Topographic Survey / Engineering Design
  2. Obtain Easements (if necessary)
  3. Apply for Permits (if necessary)
  4. Bid Project
  5. Hold “Day of Review”
  6. Construct Project

# Public Comment