

# Seidel Drain

## Public Informational Meeting

Saginaw Charter Township Fire Station #1

November 21, 2016

6:30 PM



Brian J. Wendling

Saginaw County Public Works Commissioner



# Purpose of Meeting



- Inform landowners in drainage district of project status
- Drain Commissioner to receive input and comments from landowners on the proposed plan

# Presentation Agenda



- Drain Background
- Drainage District
- Engineering Study
- Project Options
- Questions and Comments
- Next Steps

# Drain Background

- August 25, 2014 - Landowner Petition Filed
  - Signed by 35 Landowners
- May 21, 2015 – Board of Determination
  - Testimony of:
    - Flooding in the streets
    - Standing stagnant water in open ditch
    - Sediment and vegetation obstructing open ditch
  - Project was found necessary
- July 2015 Spicer Group performed engineering study of Seidel Drain

# Drainage District

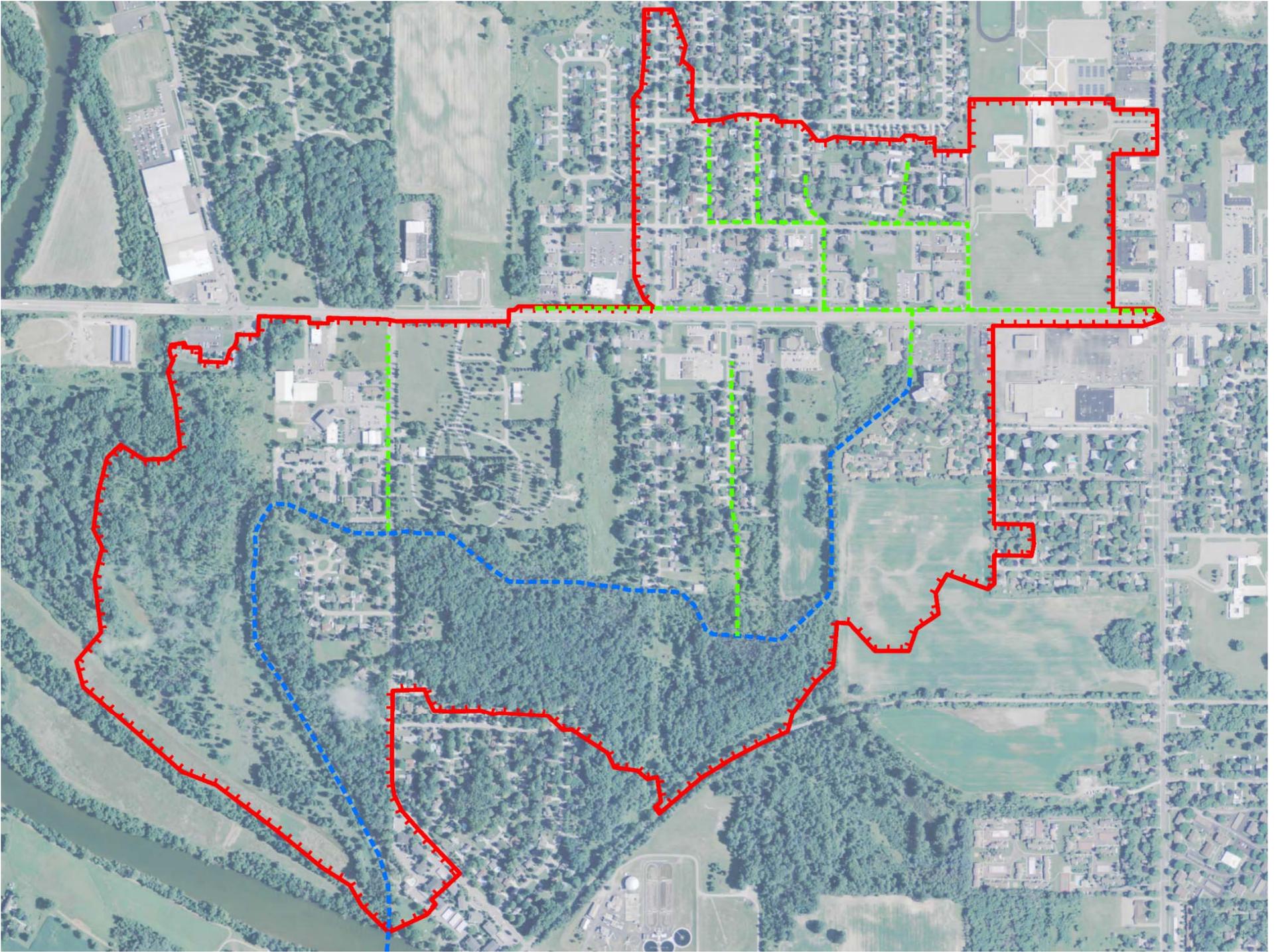


- What is the drainage district?
  - Lands that contributes storm water to drain
  - Drainage District serves as the special assessment district
  
- Seidel Drainage District includes:
  - Saginaw County
  - Saginaw Charter Township
  - Mid-Michigan Railroad
  - MDOT
  - Landowners – Approximately 413 Parcels

# Drainage District



- Verified drainage district boundary
  - Reviewed historical drain records
  - Reviewed contour map
  - Verified existing infrastructure and drainage patterns in the field
  
- Drainage District
  - 507 Acres
    - 413 Parcels



# Engineering Study



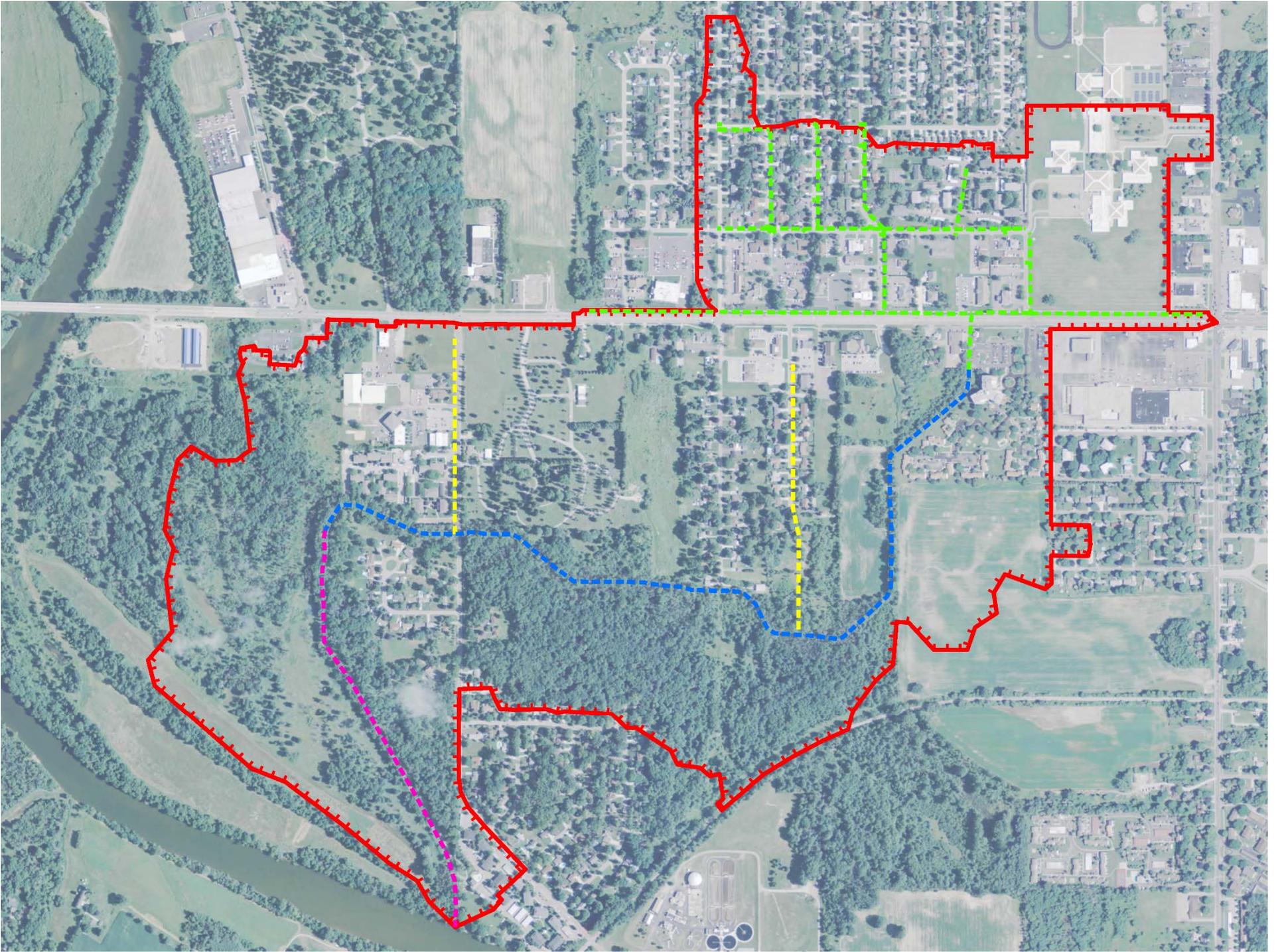
- Completed a field inventory of all drainage infrastructure in the district.
  - Documented locations, sizes, materials, conditions of existing storm sewers, manholes, and catch basins
  - Reviewed existing crossings on open drain
- Completed hydrology calculations to estimate flow rates in drainage system for 10-year storm.
  - 1.43 inches of rain in a 1-hour period
  - 3.05 inches of rain in a 24-hour period

# Engineering Study (cont.)

- Developed a hydraulic model to determine proper storm sewer sizes to convey the 10-year storm flow rates.
- Analyzed two options:
  - Upsize storm sewer system to convey the 10-year storm.
  - Construction of a storm water detention basin on White Pine Middle School property and upsize storm sewer system to handle reduced 10-year storm flow rate.
- Prepare Cost estimates for analyzed options

# Engineering Study (cont.)

- Identified that the option of constructing a storm water detention basin on school property was not a viable option.
- Option of upsizing storm sewer system included:
  - 13,000 +/- feet of new storm sewer ranging in size from 60" to 12" (on north side of M-46)
  - Repaving roads receiving new storm sewer
  - Cleanout of open channel from just downstream of St. Andrews to M-46
  - Replacement of existing open drain crossings



# Project Options



- Project identified in study to provide 10-year storm level of service.
  - Estimated cost: \$3.4 Million
  - Current petition does not meet the requirements of a project this size due to the fact that the storm sewer size exceeds 36 inches in diameter.
  - Project would require a new petition with signatures from at least  $\frac{1}{2}$  of the freeholders in the district or a petition from the township.

# Project Options



- Project with reduced scope that could be accomplished under current petition.
  - Estimated cost: \$410,000
  - Project would include:
    - Clearing and cleaning out of existing open drain from just downstream of St. Andrews to M-46
    - Replacement of existing open drain crossings
    - Cleaning and video inspection of existing storm sewers
    - Minor repairs to existing storm sewers where problems are found during video inspection

# Next Steps



- Project with storm sewer replacement:
  - Obtain a valid petition
  
- Reduced Project:
  - Survey and design on open channel drain improvements
  - Clean and video existing storm sewers
  - Prepare plans and receive bids from contractors
  - Begin construction in 2017

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# Questions or Comments?

