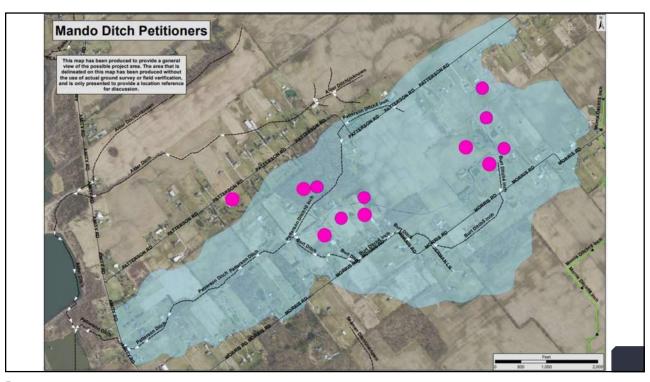


Project Background

- The Mando Ditch petition was signed by Frank Mando on February 13, 2021.
 - Total, the petition has signatures from owners of 12 properties
- The work petitioned for includes "to clean, construct, install tile, relocate and alter the drainage system as necessary to provide proper and sufficient drainage and extending such work downstream as necessary to provide a proper outlet."



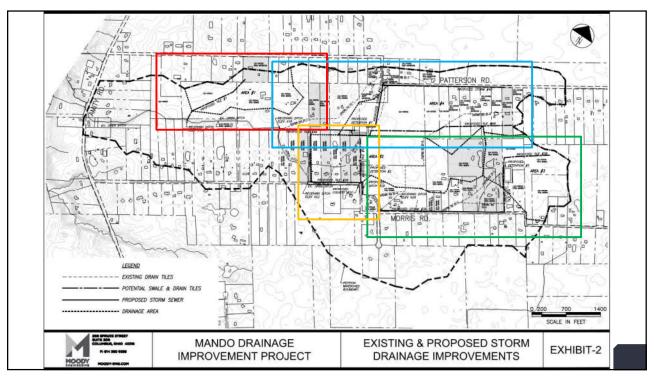
The Lot

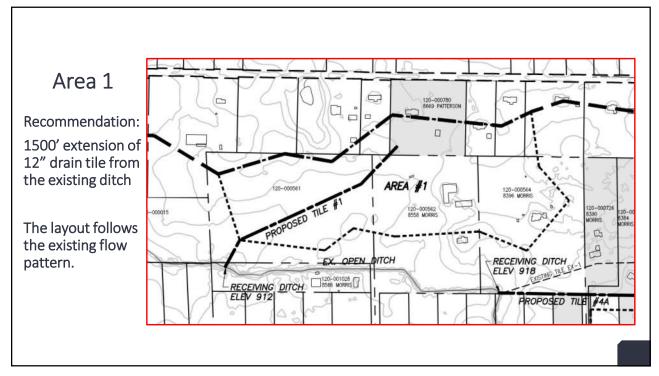


Existing Conditions

- After draining through Prairie Oaks Metro Park, the Mando Ditch watershed ultimately drains to Big Darby Creek, a national scenic river.
- The project area is best described as rural agricultural and rural residential consisting of soils that are poorly drained with flat topography.
- The land use consists of crop farming, small residential farms, and large-lot, single-family homes.
- To our knowledge, all homes obtain water from onsite wells and treat wastewater with household sewage treatment systems (HSTSs).
- The areas with poor drainage and ponding are not directly tied to a common cause, but rather due to locally entrapped drainage due to the former agricultural use of the area, deteriorating tile system, and disruptions from residential development.







Area 2

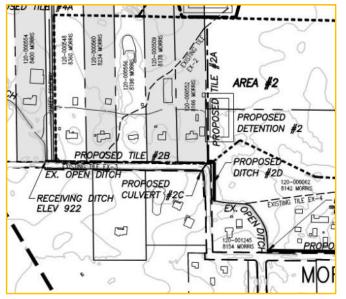
Recommendations:

Tile #2A: 890' of 12" drain tile

Optional Detention basin #2 to reduce release rates

One of the following alternatives:

- #2B: 1050' of tile on the north side of Morris Rd.
- #2C: Outlet tile directly across Morris Rd. just east of the drive to 8166 Morris Rd.
- #2D: Extend swale and tile to the east around the curve to intersect the existing ditch.



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Recommendations:

Area 3 Tile #3A: Replacement of the existing tile along Morris Rd (2536' of 30" Storm Sewer)
Tile #3B: Re-establish the field tile to properly drain those areas (2050' of 12" Tile)
Optional Detention basin #3 to reduce release rates

