

TUSCARAWAS COUNTY METROPOLITAN SEWER DISTRICT
WATER AND SEWER DEPARTMENT

SANITARY ENGINEER

Michael Jones, P.E.

SUPERINTENDENT

Justin Angel

COMMISSIONERS

Chris Abbuhl

Kerry Metzger

Joe Sciarretti

RECEIVED

FEB 08 2017

**Ohio Environmental
Protection Agency
Southeast District**

February 2, 2017

Debra Prim

Ohio EPA – Southeast District Office

2195 Front Street

Logan, OH 43138

Re: Lead Mapping for Tuscarawas County Metropolitan Sewer District's Water Distribution Systems

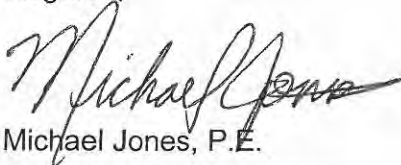
Dear Ms. Prim:

Enclosed, please find a CD with Lead Mapping and Narratives of our following water distribution systems:

1. **Wilkshire Hills Community Water System**
2. Dundee Community Water System
3. Ridgewood Community Water System
4. Wainwright Community Water System

The enclosed information has been prepared in accordance with Ohio EPA Guidance Document #PWS-04-001. If you have any questions or need additional information, please contact me.

Regards,



Michael Jones, P.E.

Director/Sanitary Engineer

We are an equal opportunity provider and employer

LEAD MAPPING

Wilkshire Hills Community Water System (PWS #7901612)

Dundee Community Water System (PWS #7902012)

Ridgewood Community Water System (PWS #7901912)

Wainwright Community Water System (PWS #7902103)

March 9, 2017

Prepared by:

Tuscarawas County Metropolitan Sewer District

9944 Wilkshire Boulevard NE

Bolivar, OH 44612

(330) 874-3262

Summary

In accordance with Section 6109.121 of the Ohio Revised Code, the Tuscarawas County Metropolitan Sewer District (TCMSD) is required to prepare mapping of its water distribution systems to identify areas that are known or likely to have lead service lines. TCMSD is also required to provide narrative descriptions and mapping of buildings served by its systems describing their risk or probability of containing lead solder, fixtures, or pipes.

In 1986, the Safe Drinking Water Act (SDWA) was amended to ban the use of lead solders which contain more than 0.2% lead. These provisions became effective in Ohio Plumbing Code on March 30, 1988. These amendments also required the use of lead-free flux, pipes and fittings in new installations and repairs of public water systems, or any plumbing within a residential or non-residential facility which provides water for human consumption. At that time, lead-free was defined as having no more than 8.0% lead. The definition of lead-free was lowered to 0.25% in 2014.

Distribution System Mapping

Mapping of the Distribution System is provided in Appendix B. This mapping shows parcels with a color coded "risk" category of High, Medium, or Low based primarily on the age of the structure being served. Where complete data is available in our GIS system, water mains are shown for reference. Where information is available and incorporated into our GIS system, curb boxes and service lines are also shown.

It should be noted that the GIS mapping for our facilities is a work in progress, and what is currently shown is the culmination of approximately 3 to 4 years of continuously updating and improving on existing information and field location of existing facilities. At present, the Dundee Community Water System infrastructure has not been completed in our GIS system due to the ongoing waterline replacement project. Upon completion of this project, we will begin the process of locating the newly constructed system.

Service Line Materials

There are no known lead service lines in any of the TCMSD's four community water systems. On September 18, 1967, TCMSD established and adopted Rules, Regulations, Procedures, and General Specifications Governing Sanitary Sewerage and Water Supply in Tuscarawas County.

Ohio (hereinafter referred to as “Rules”). With the exception of the Mineral City area, all systems were constructed under the provisions of these Rules. The original Rules, as well as all subsequent amendments of such Rules prohibited the use of lead service lines.

The County acquired the Mineral City portion of the Wilkshire Hills Community Water System from the Village of Mineral City in the late 1980's/early 1990's. Since the original transfer of the system, many sections of the original water mains and service lines have been replaced with new service lines installed to the street right-of-way line. Based upon interviews with TCMSD staff members who were present during various phases of construction of these improvements, no observations were made of lead service lines.

It has been noted that during a service line repair, a one or two foot long lead tailpiece extended from a corporation stop to a splice in the service line. This lead section was promptly removed and replaced at that time; however, there is no evidence from other service line repairs in TCMSD's records to suggest the presence of lead service lines in this area.

Narrative Descriptions of Buildings Served by Each Water System

The following criterion have been developed and mapped for buildings served by our facilities, which are based upon the construction date for each building. Building construction dates were determined from the Tuscarawas County Auditor's real estate records. These risk factors are shown on the mapping in Appendix B, and are described as follows:

- High Risk – Any buildings built before 1988. Buildings in Ohio built prior to 1988 or that use plumbing material or solder manufactured before 1988 may have materials with greater than 8% lead and are at a higher risk of contributing lead to the drinking water than materials manufactured after 1988.
- Medium Risk – Any buildings built between 1988 and 2014.
- Low Risk – Any buildings built after 2014. Buildings built and plumbing materials manufactured after 2014 were required to have less than 0.25% lead by weight and have the lowest risk for contributing lead to the drinking water.

It should be noted that, although prohibited, some use of leaded solder or leaded components may have occurred after lead prohibitions became effective.

Wilkshire Hills Community Water System (PWS #7901612)

The majority of the buildings served by the Wilkshire Hills Community Water System were constructed in conjunction with the distribution system as new development from the early 1970's through present. The service area is primarily residential with a modest amount of commercial and industrial development as well.

The Zoar portion of the system was constructed in the 1980's and serves many older, historic homes and buildings. This system was extended in 1989 to provide service to the Cherry Hill subdivision and the Tuscarawas Valley Middle School/High School Campus. The High School was built in the late 1960's, while the Middle School was constructed in the late 1980's.

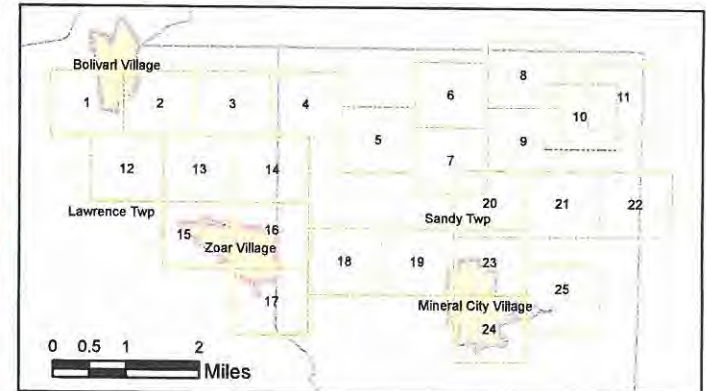
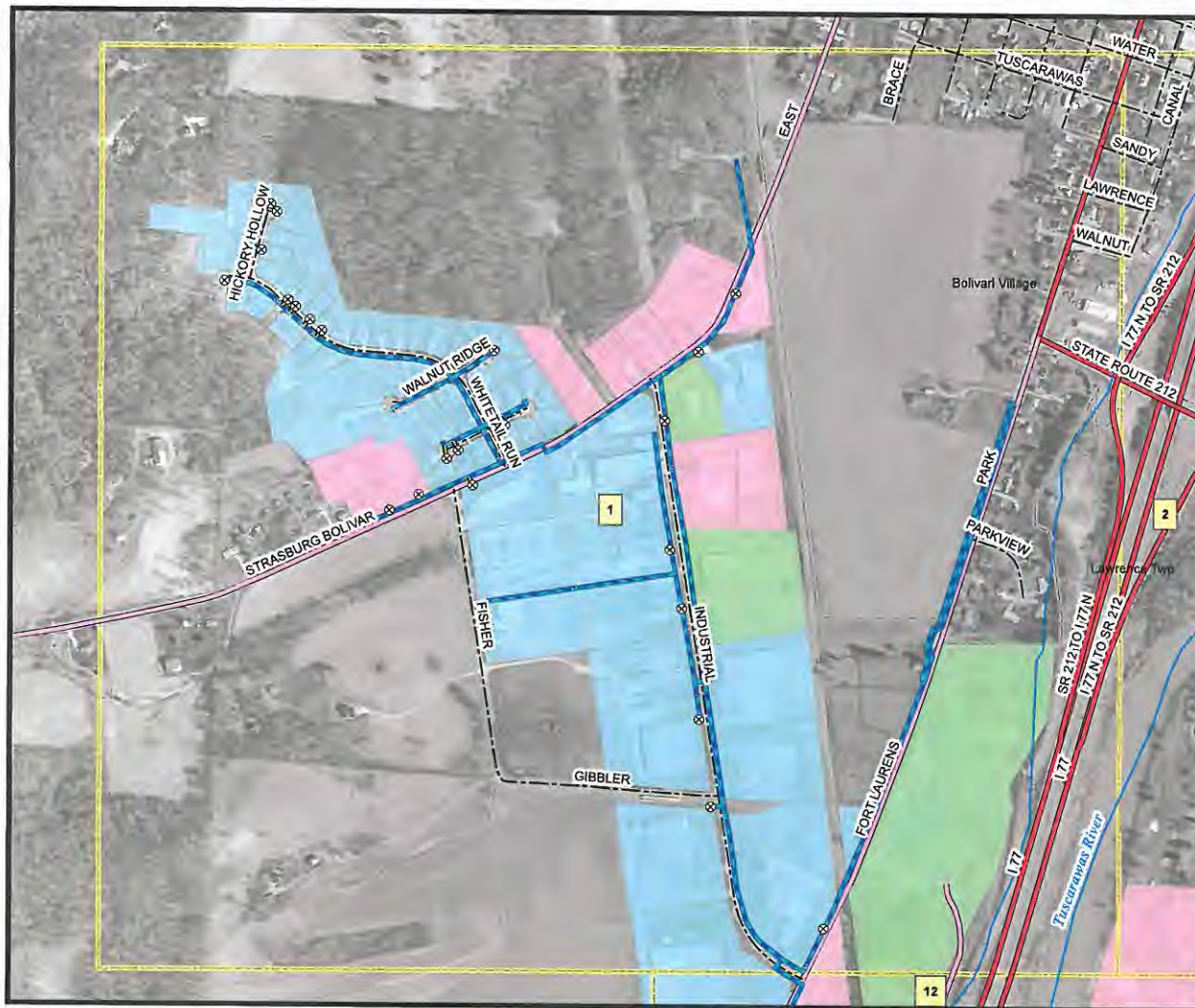
The Mineral City portion of this system was originally constructed by the Village of Mineral City (pre-1960). Although much of the water distribution system has been replaced, this portion of the system serves much older homes and buildings. This portion of the system also provides service to the Mineral City Elementary School, which was built in the WPA era of construction.

The Sandy Township/Sandyville portion of the distribution system has been more recently developed and was constructed to provide service to predominantly pre-1988 residential homes, as well as some commercial/industrial development and the Sandy Valley Local Schools complex.

As noted above, a lead risk factor has been established for each building and is shown on the mapping in Appendix B.

Appendix B – Lead Mapping

Appendix B.1 – Wilkshire Hills Community Water System Lead Mapping



Legend

- ⊗ Water Curb Stop Valves
- TUS157_HYDRO_RIVER
- Service Line (Non Lead)
- Water Mains

Streets and Highways

- Municipal/Township Roads
- County Roads
- State/Federal Highways
- Wilk_Index

Parcels

Lead Risk Factor

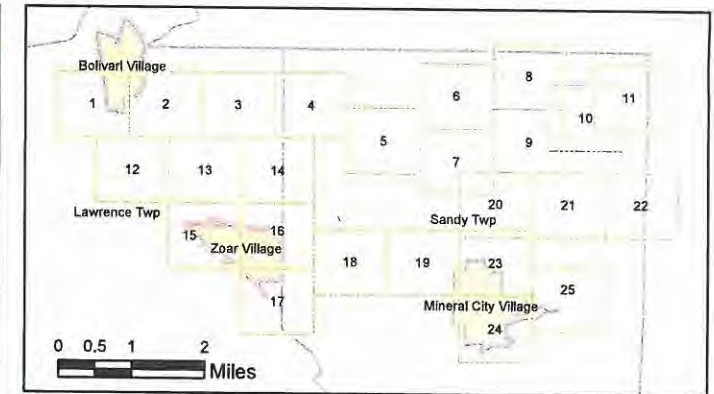
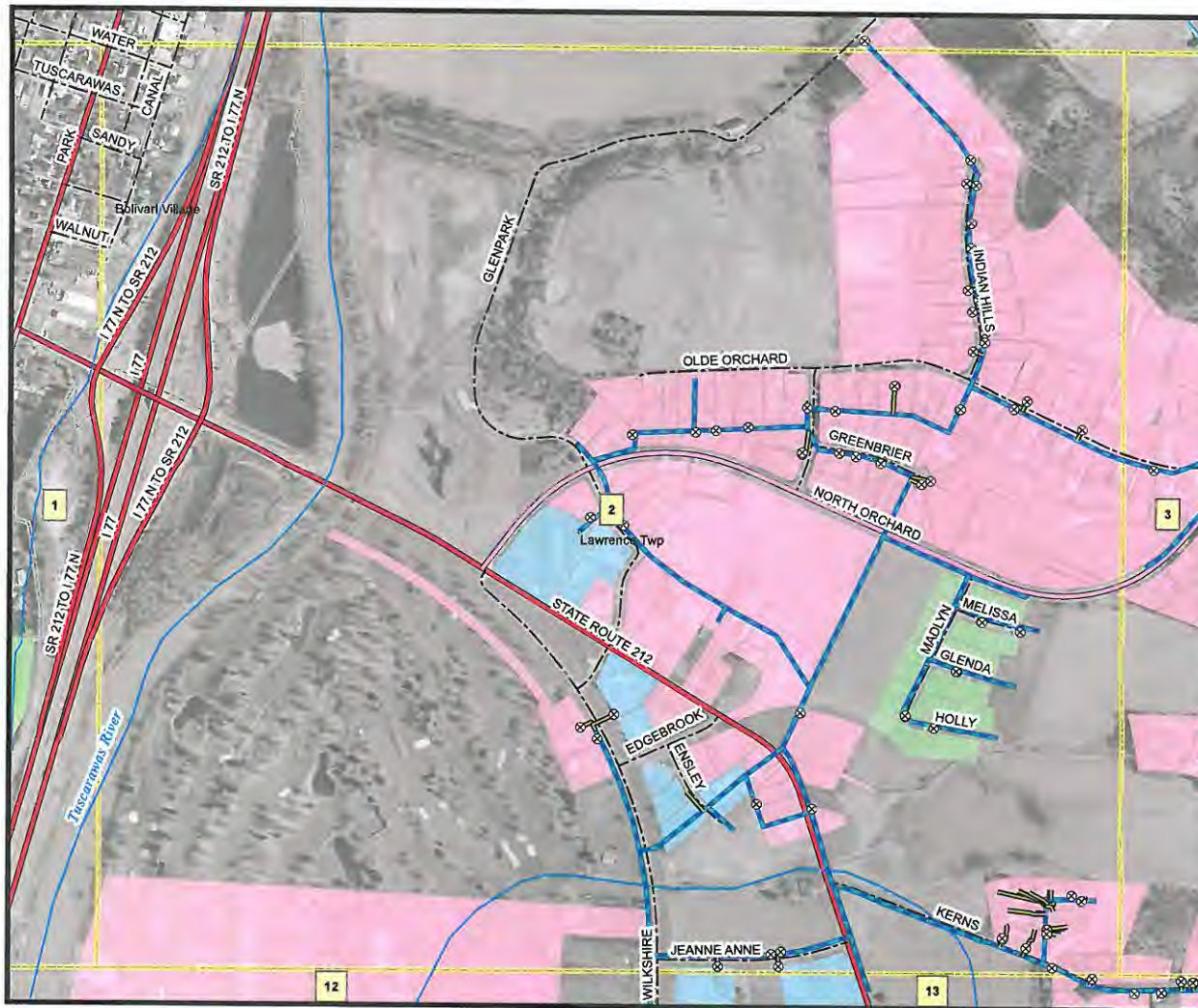
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Mapping is based upon NAD 83 - State Plane Coordinate System

0 300 600 1,200
Feet

Tuscarawas County Metropolitan Sewer District Wilkshire Hills Community Water System Lead Mapping





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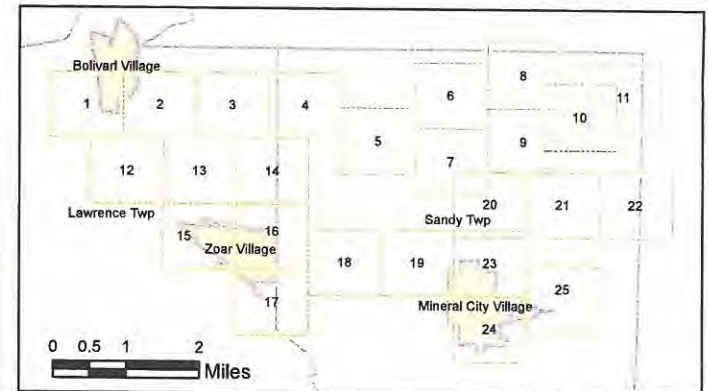
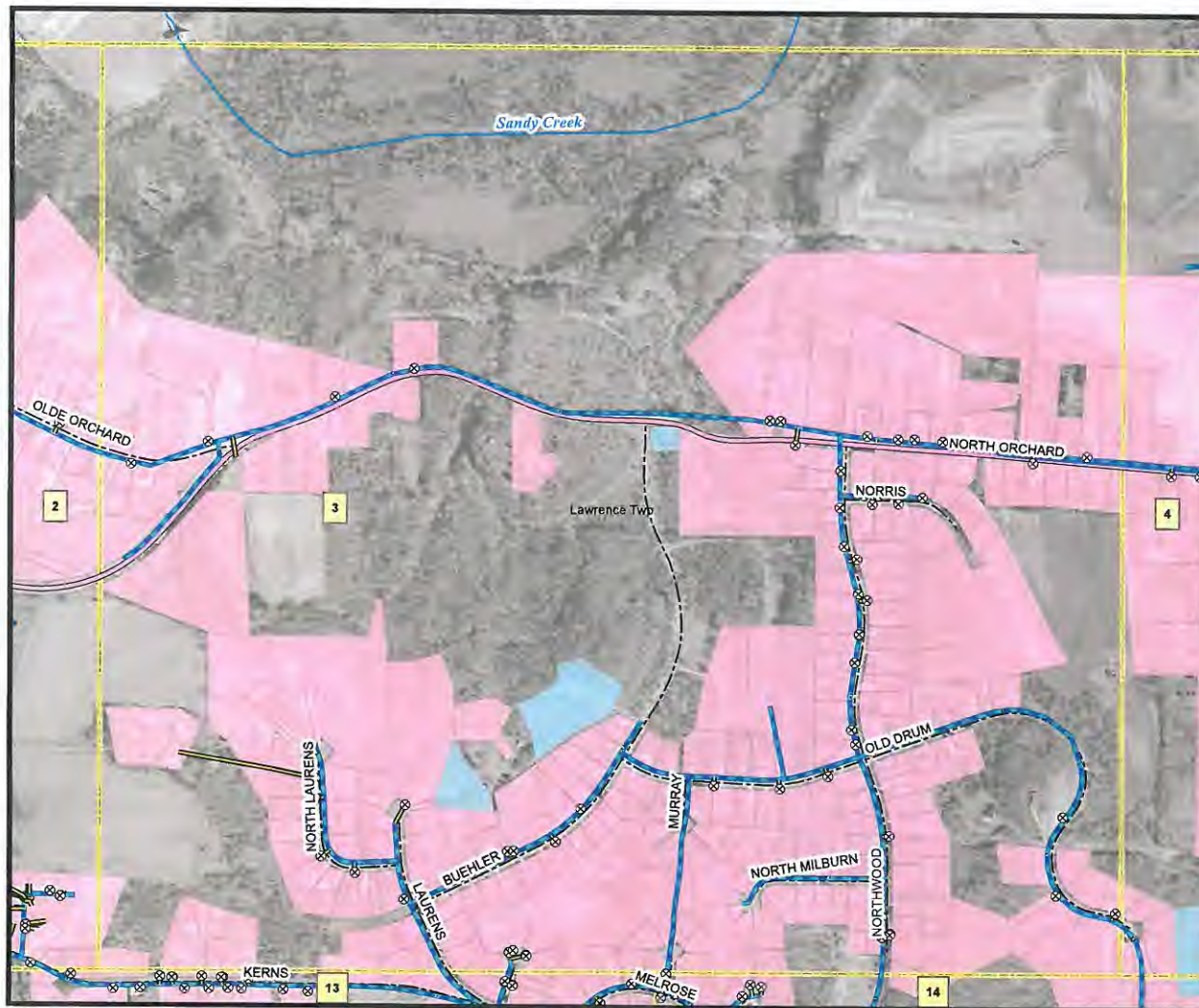
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Tuscarawas County Metropolitan Sewer District Wilshire Hills Community Water System Lead Mapping





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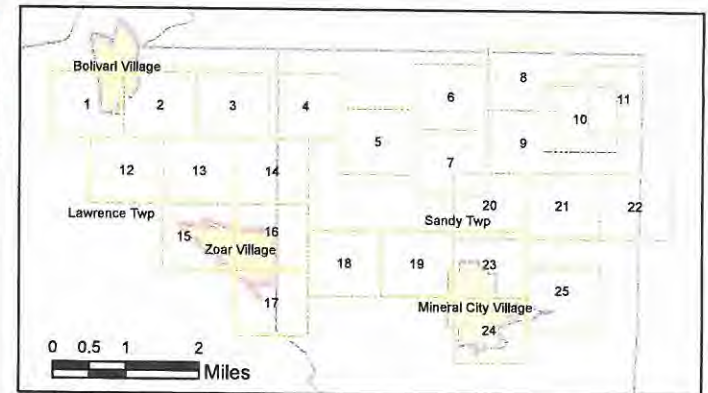
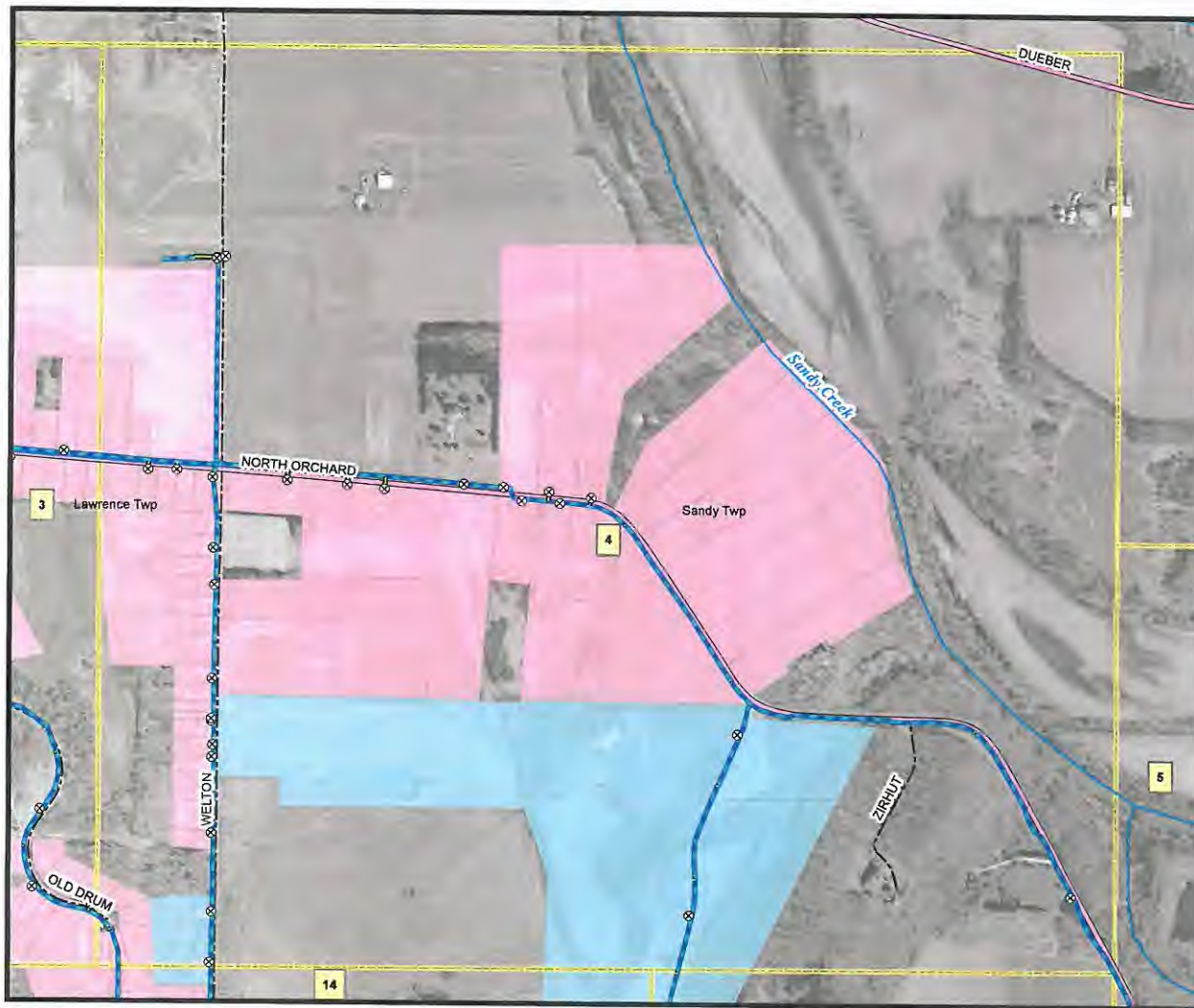
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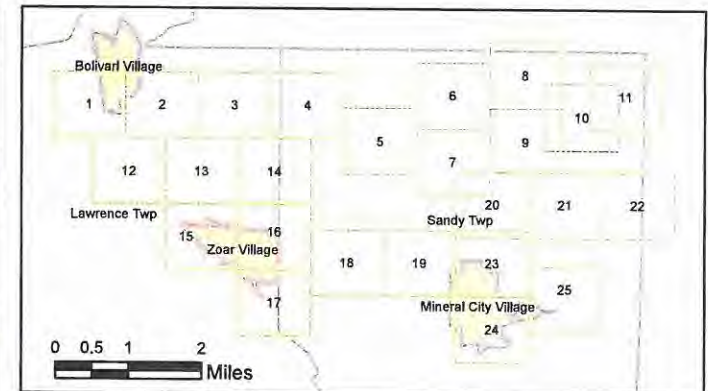
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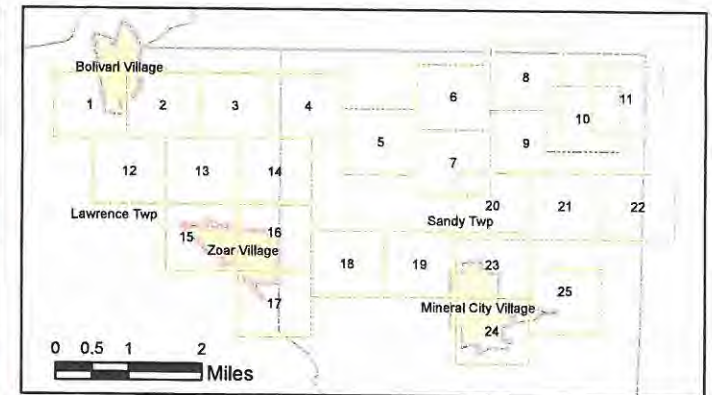
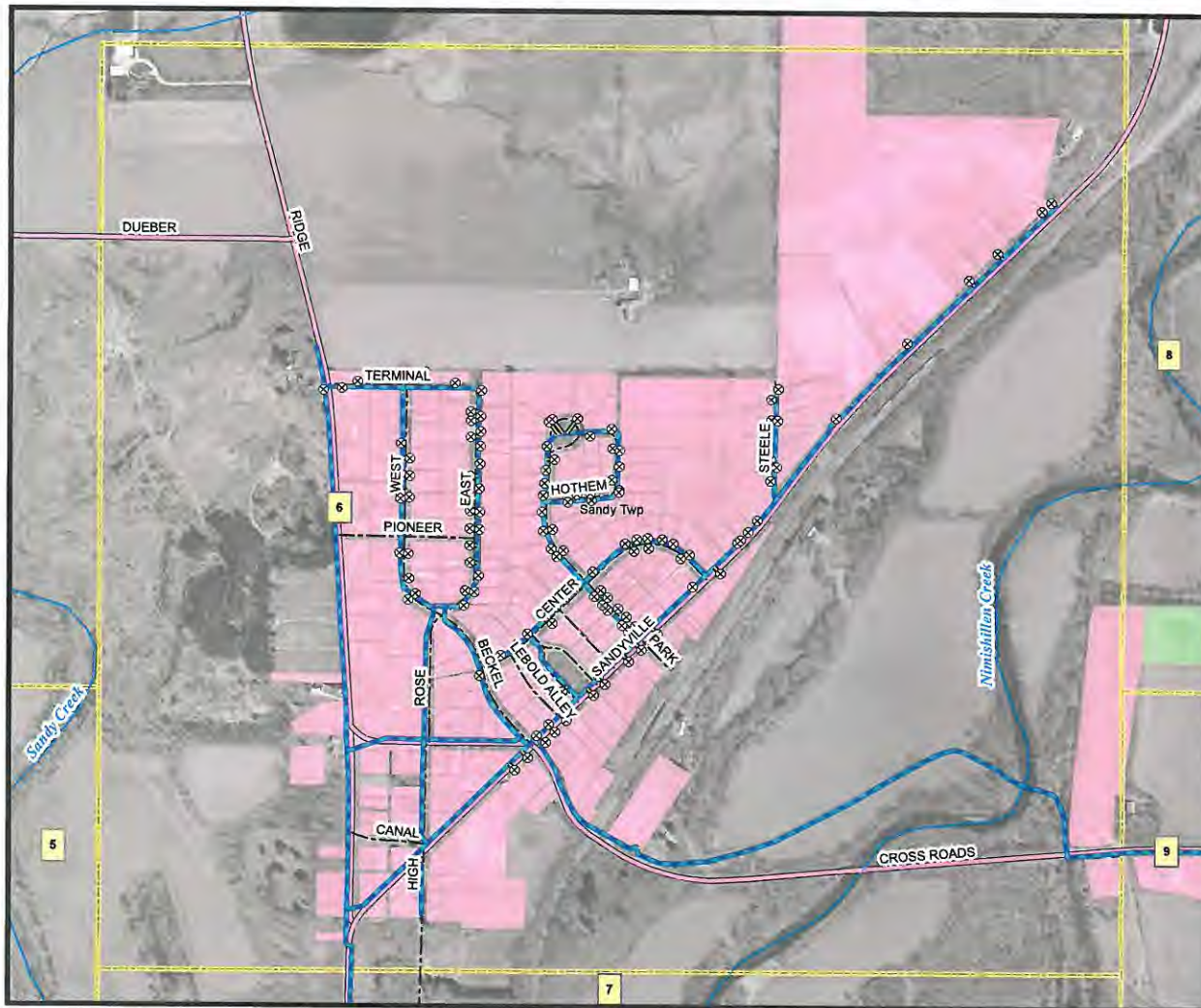
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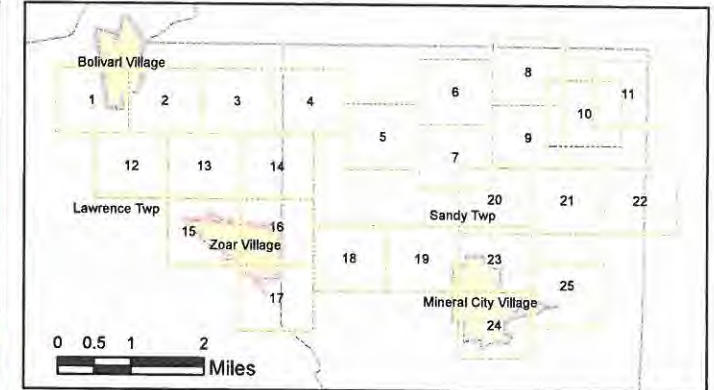
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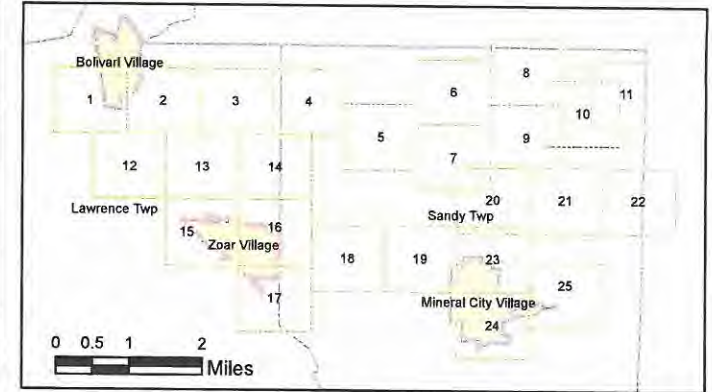
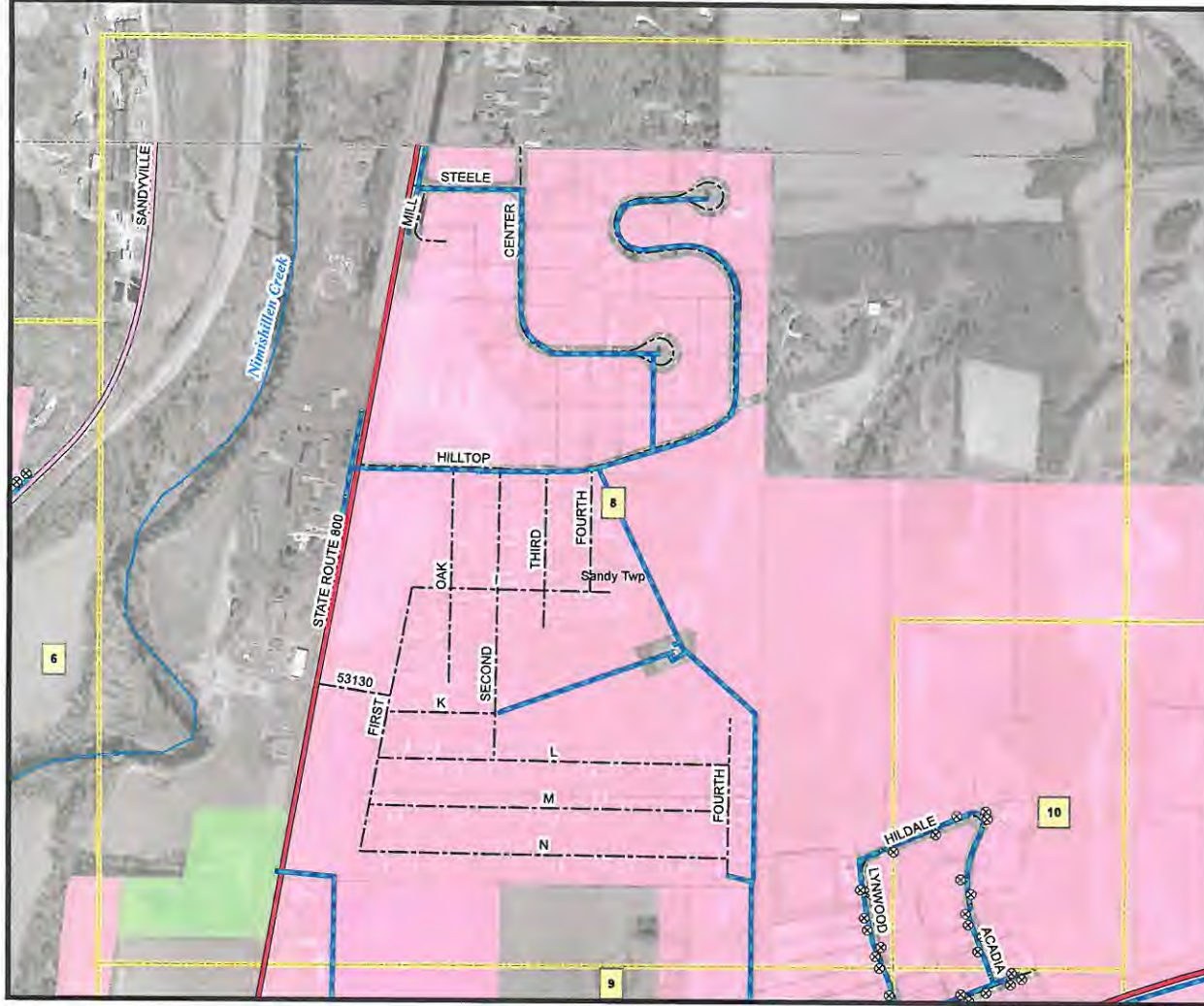
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Tuscarawas County Metropolitan Sewer District Wilshire Hills Community Water System Lead Mapping





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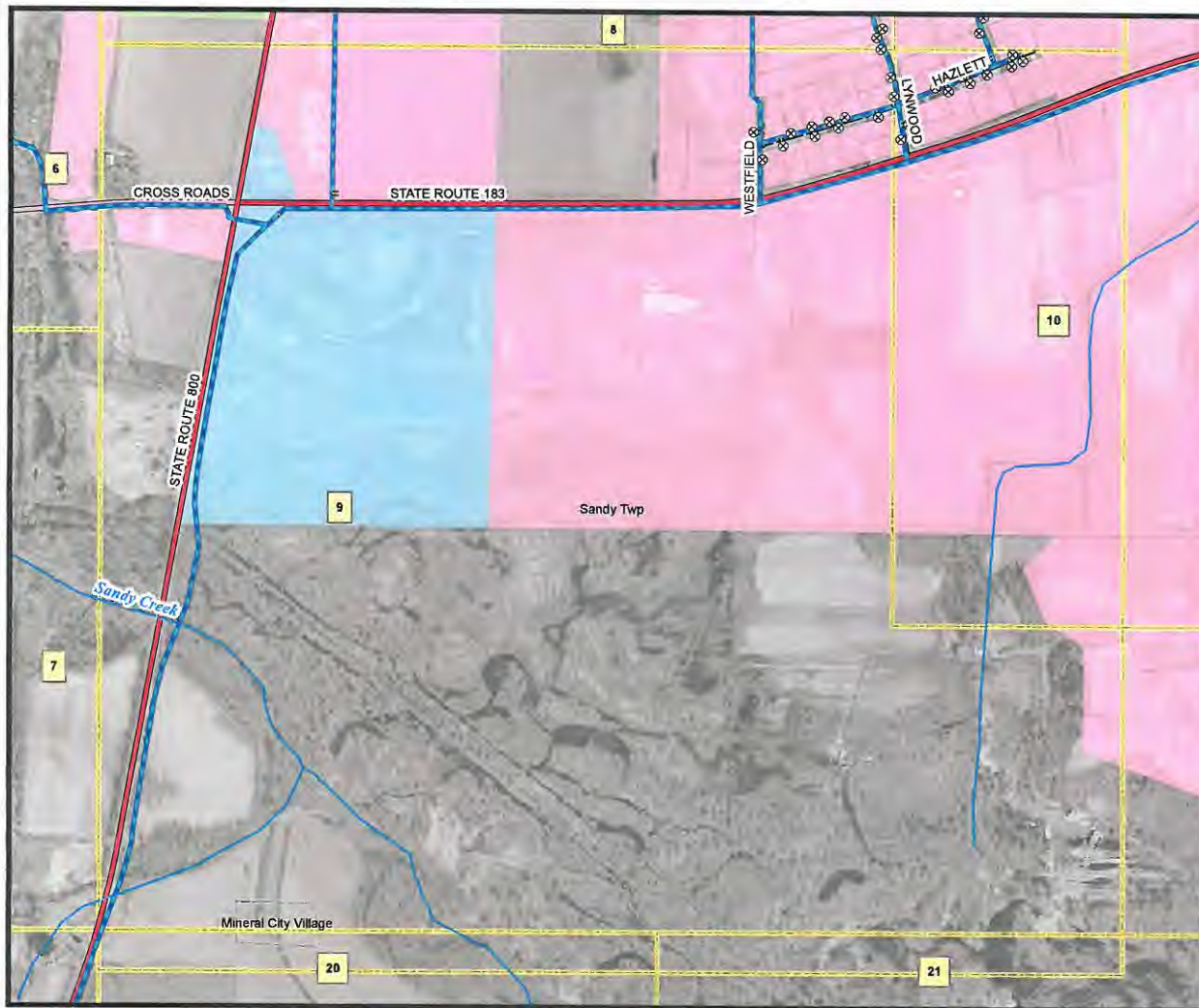
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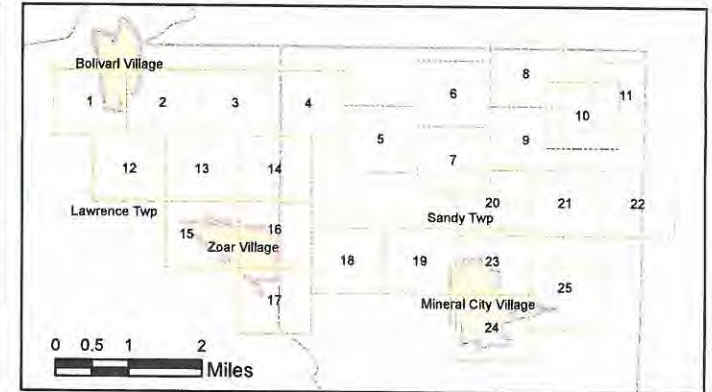
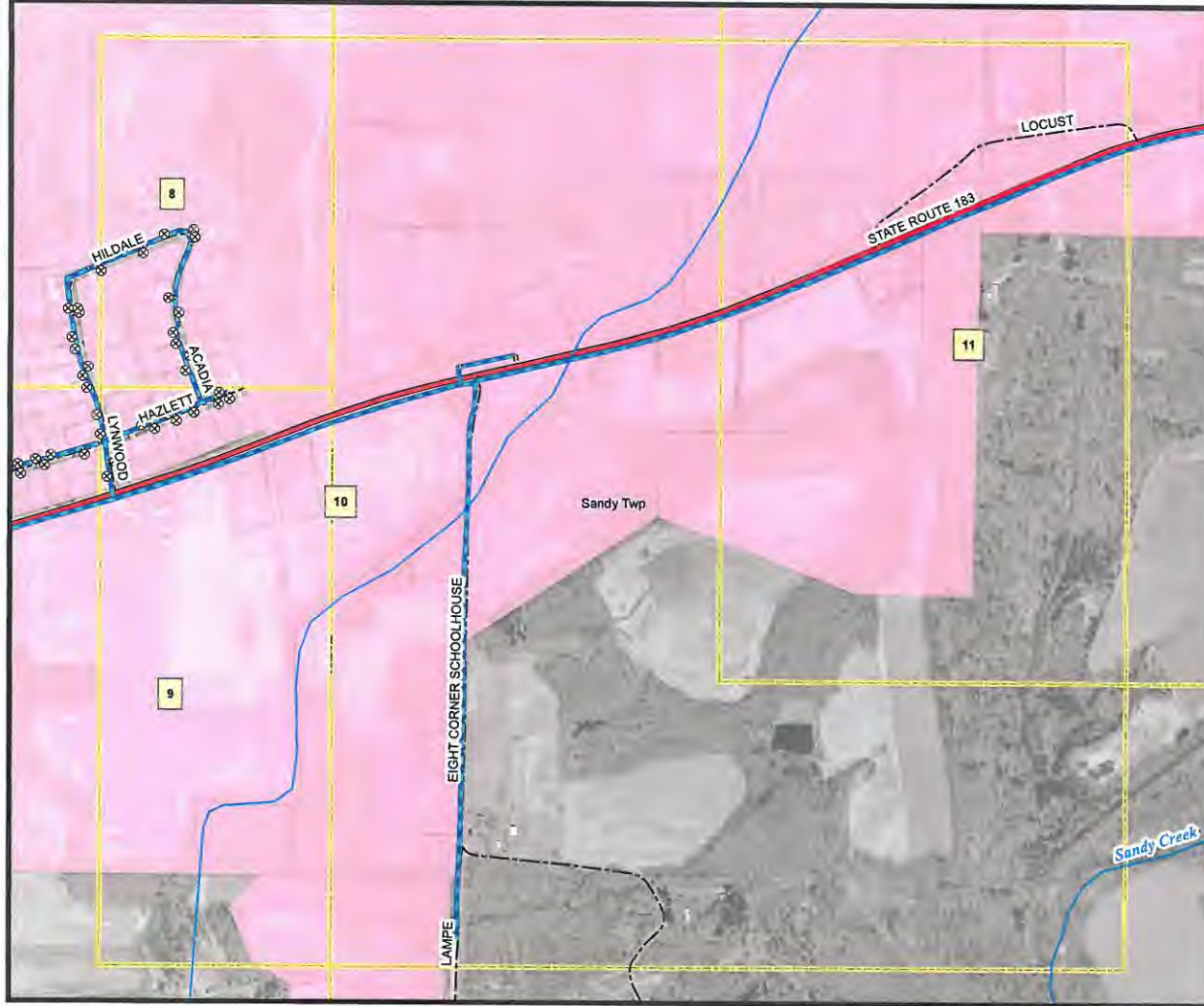
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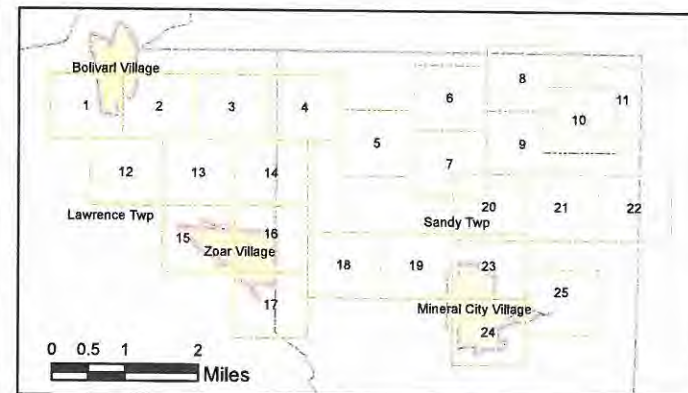
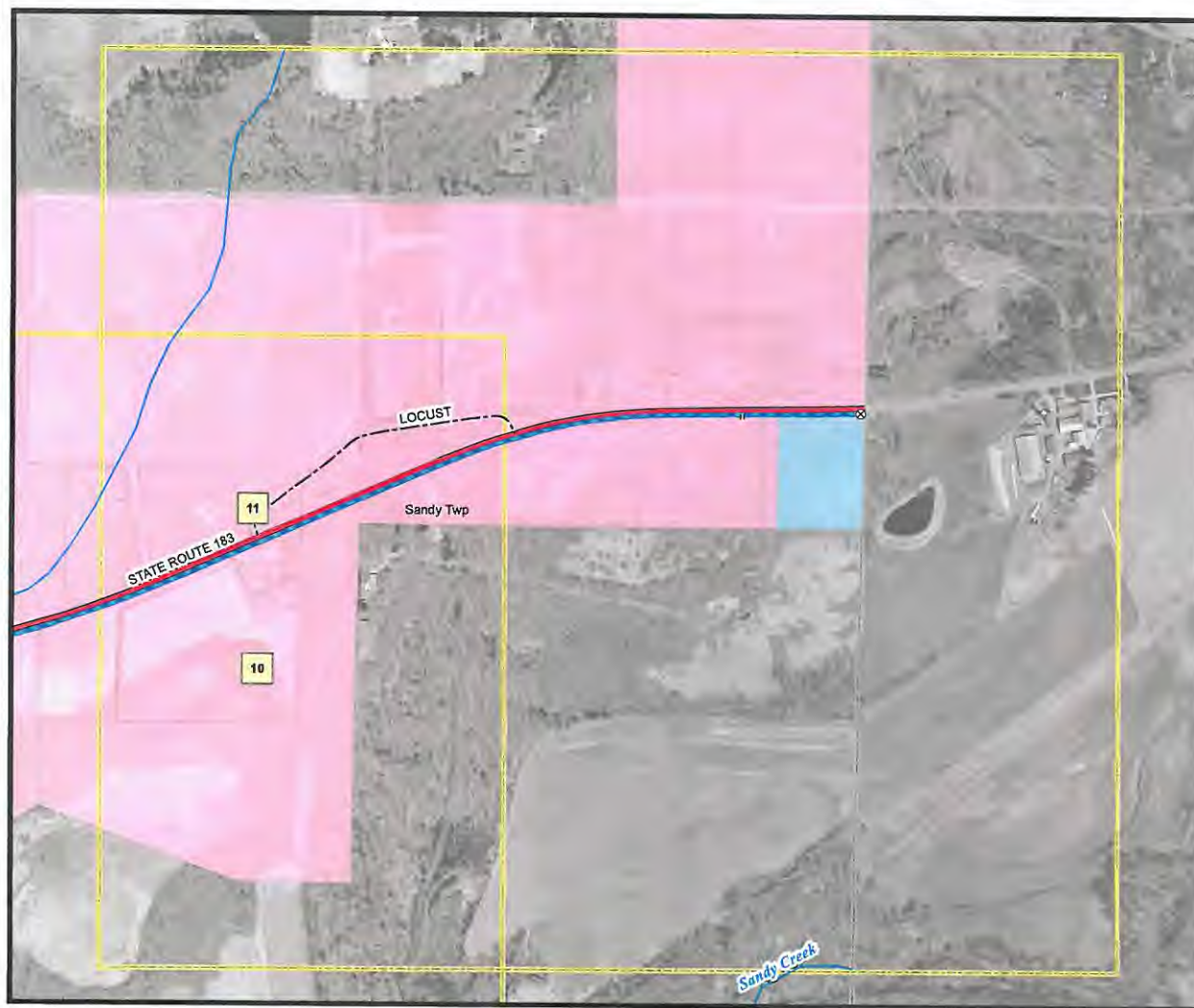
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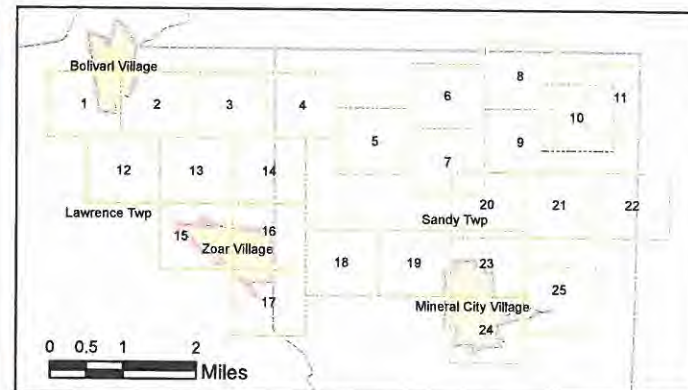
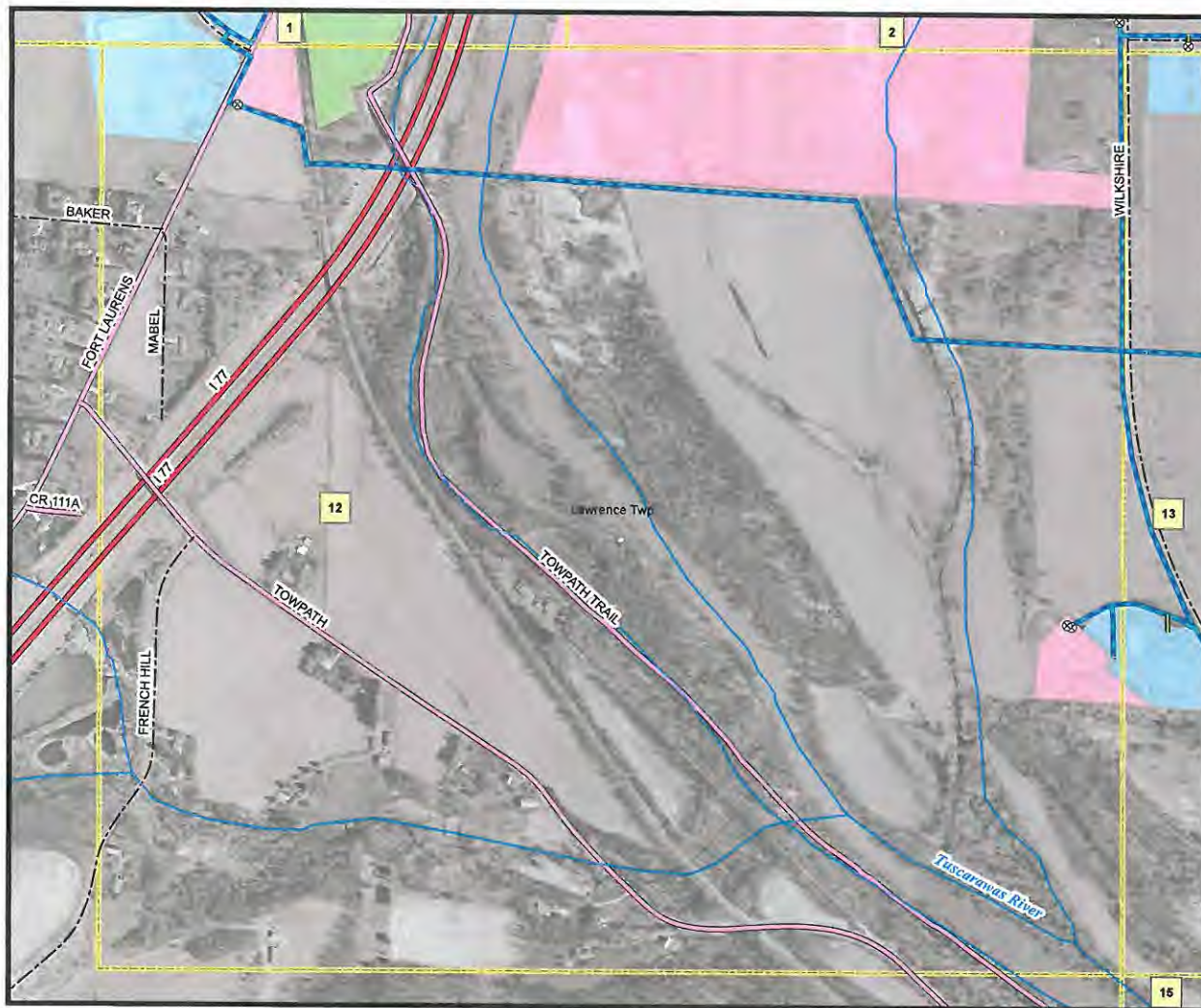
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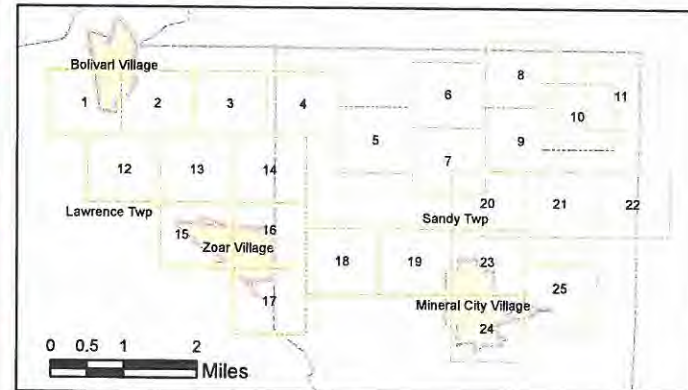
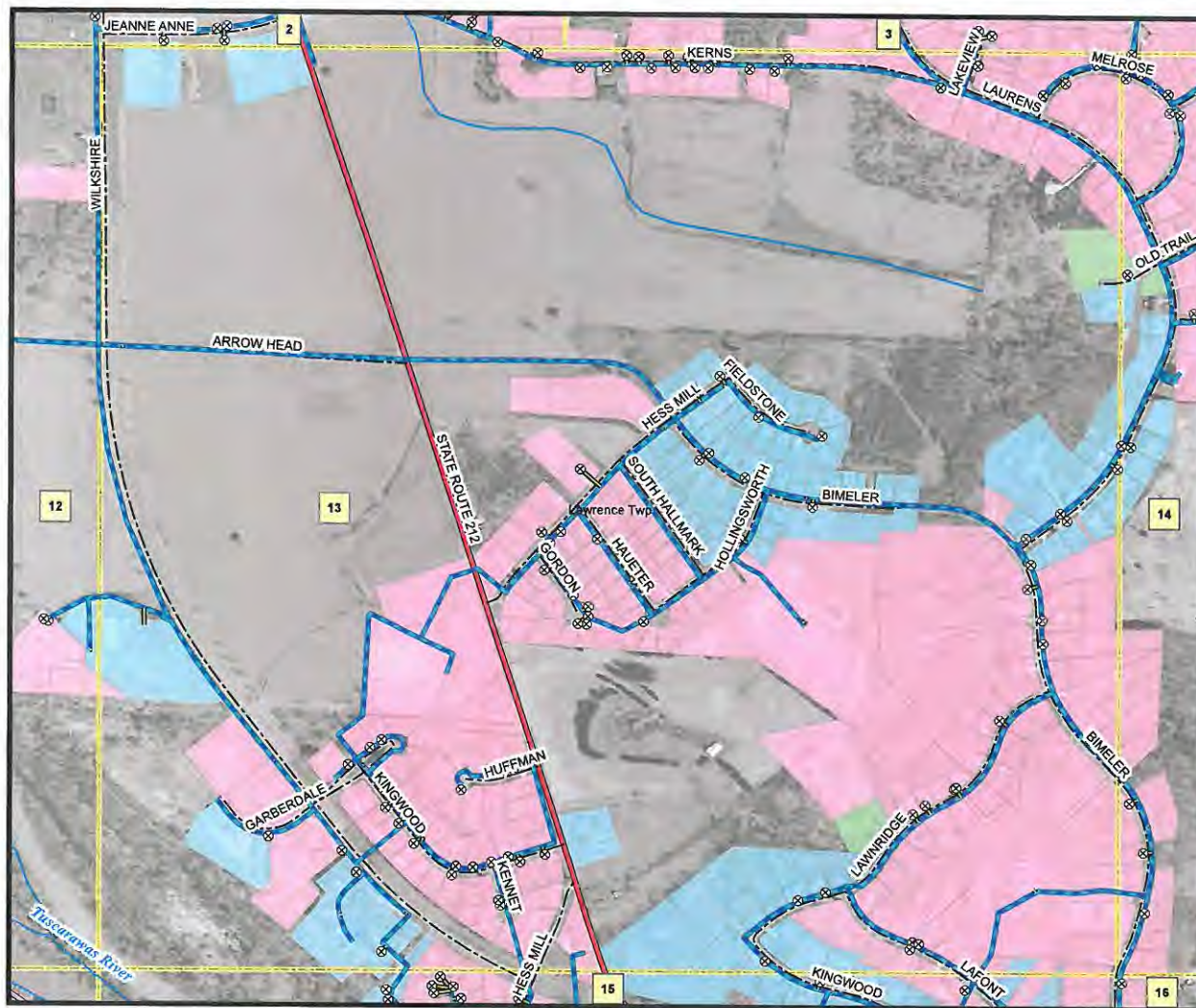
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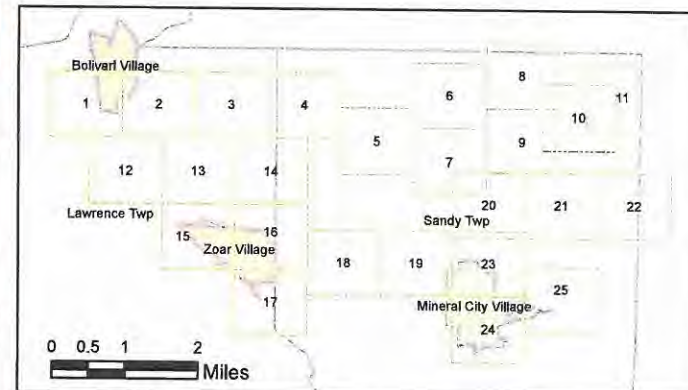
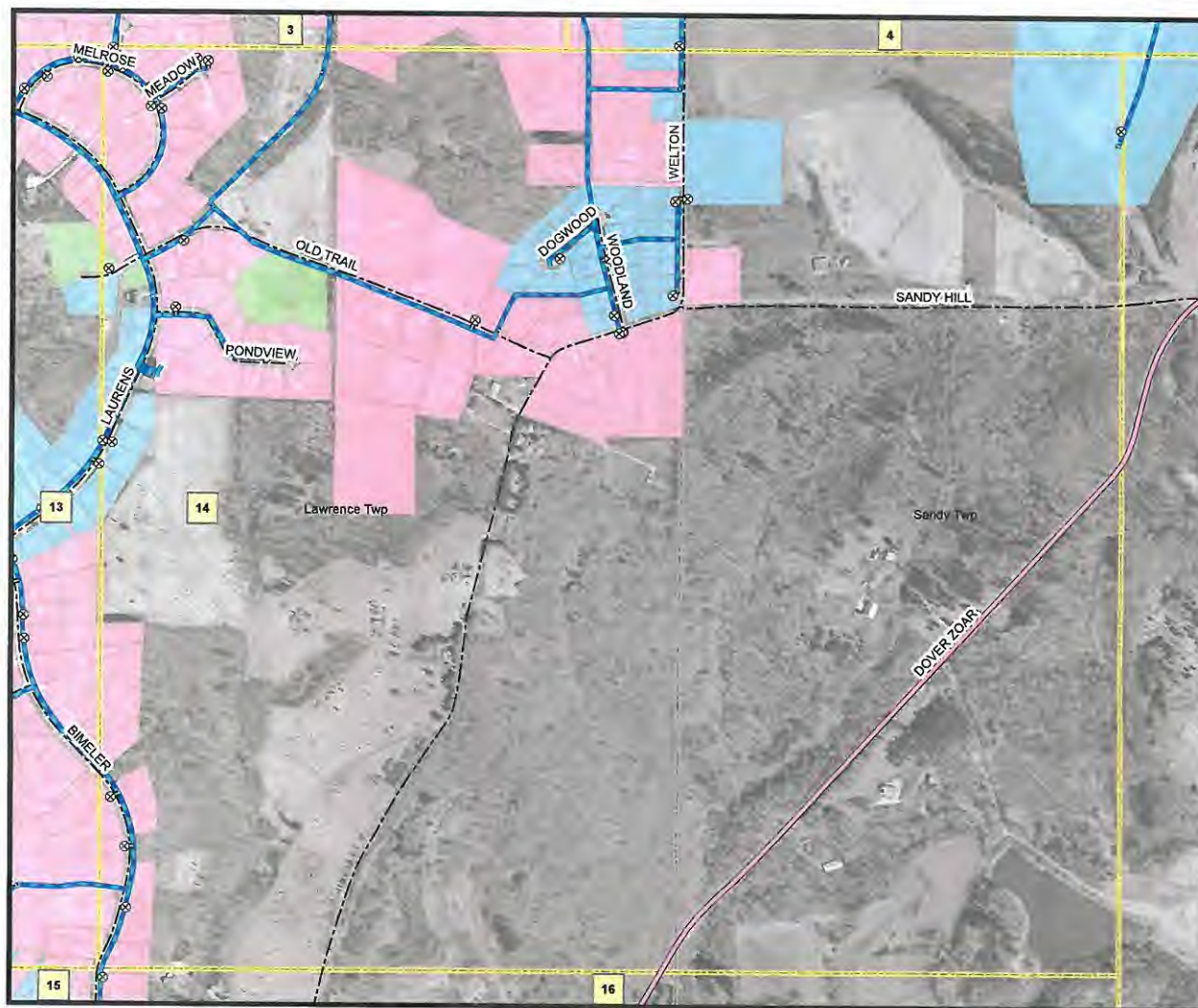
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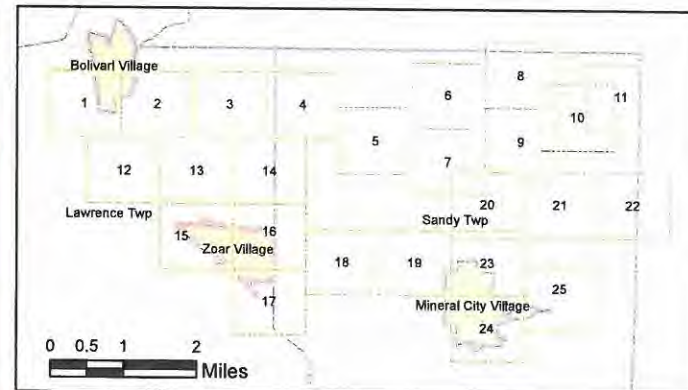
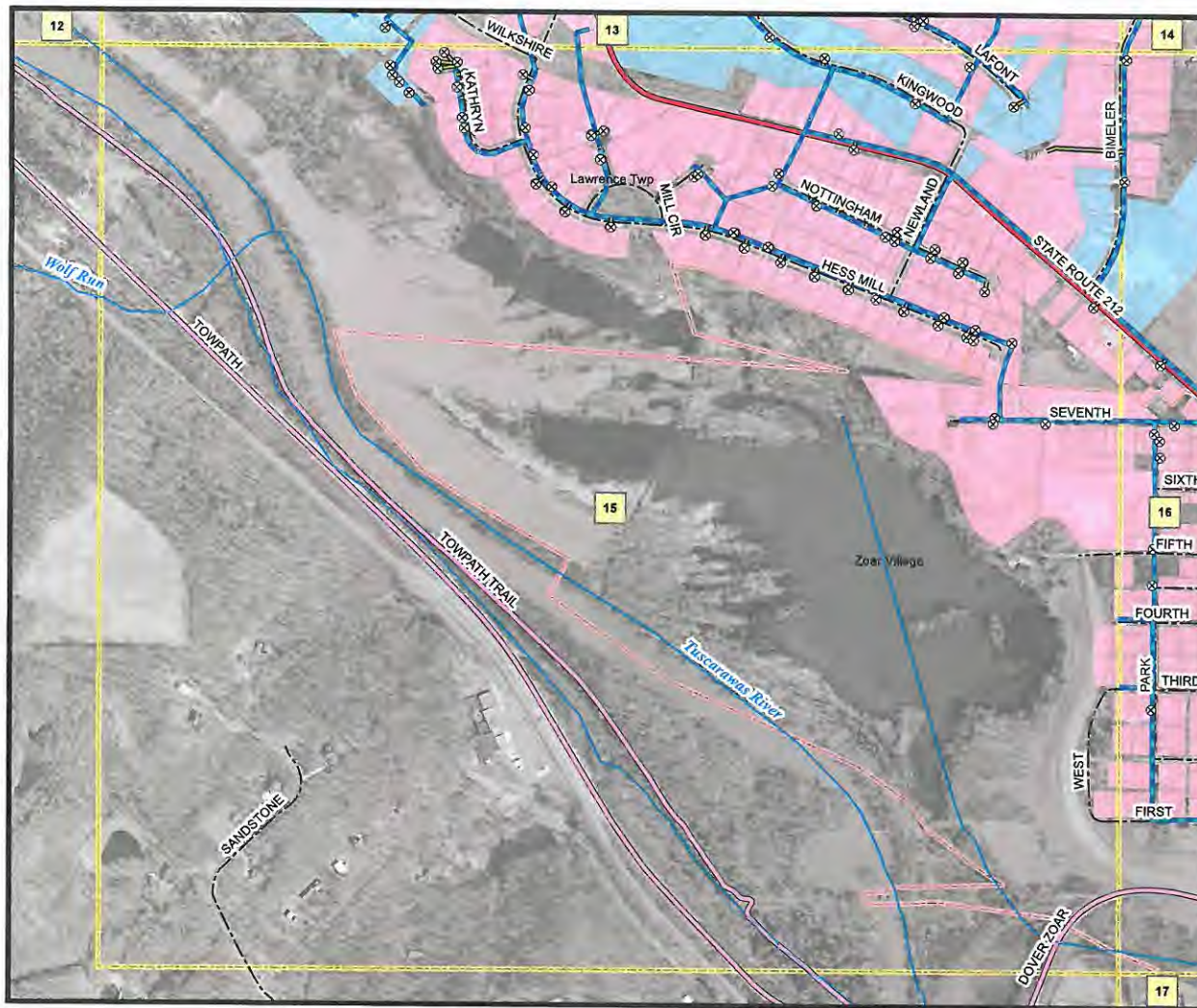
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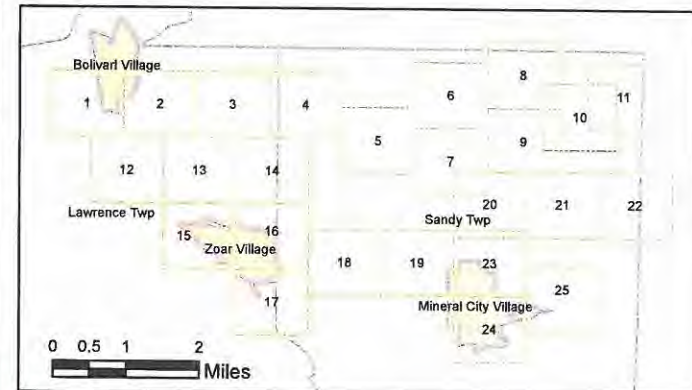
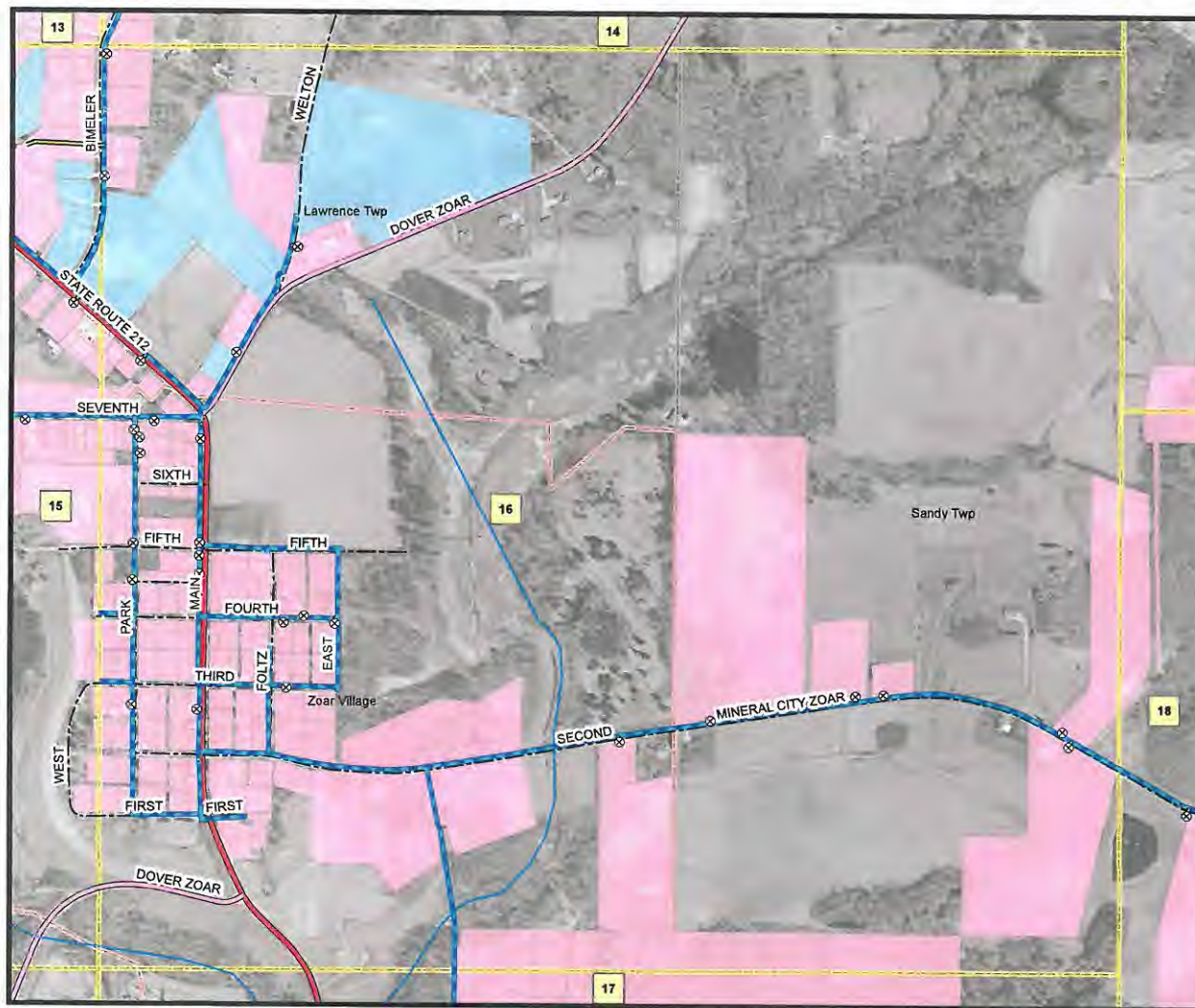
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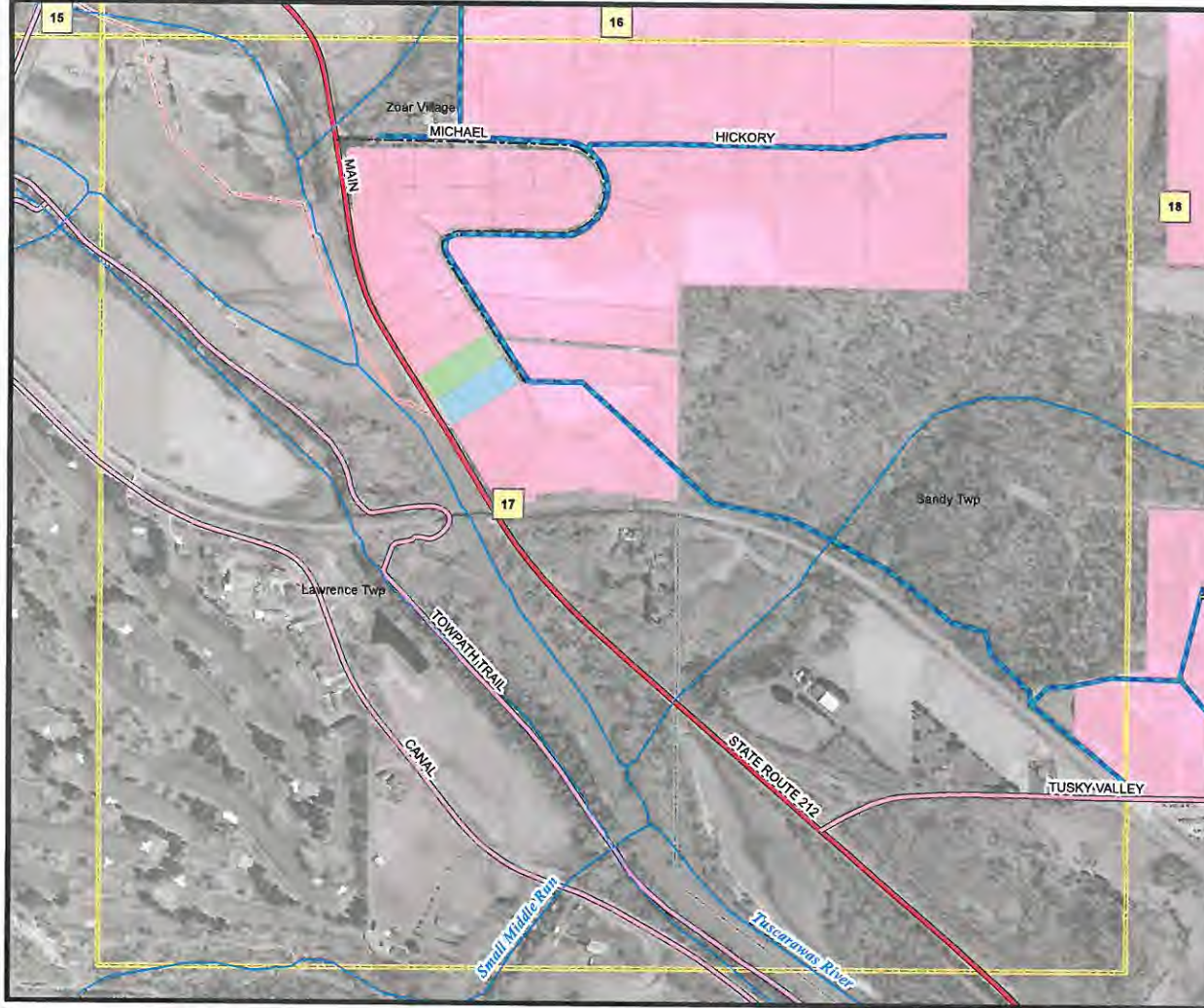
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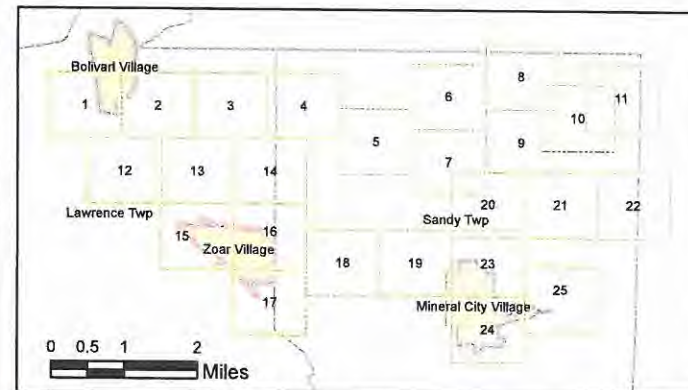
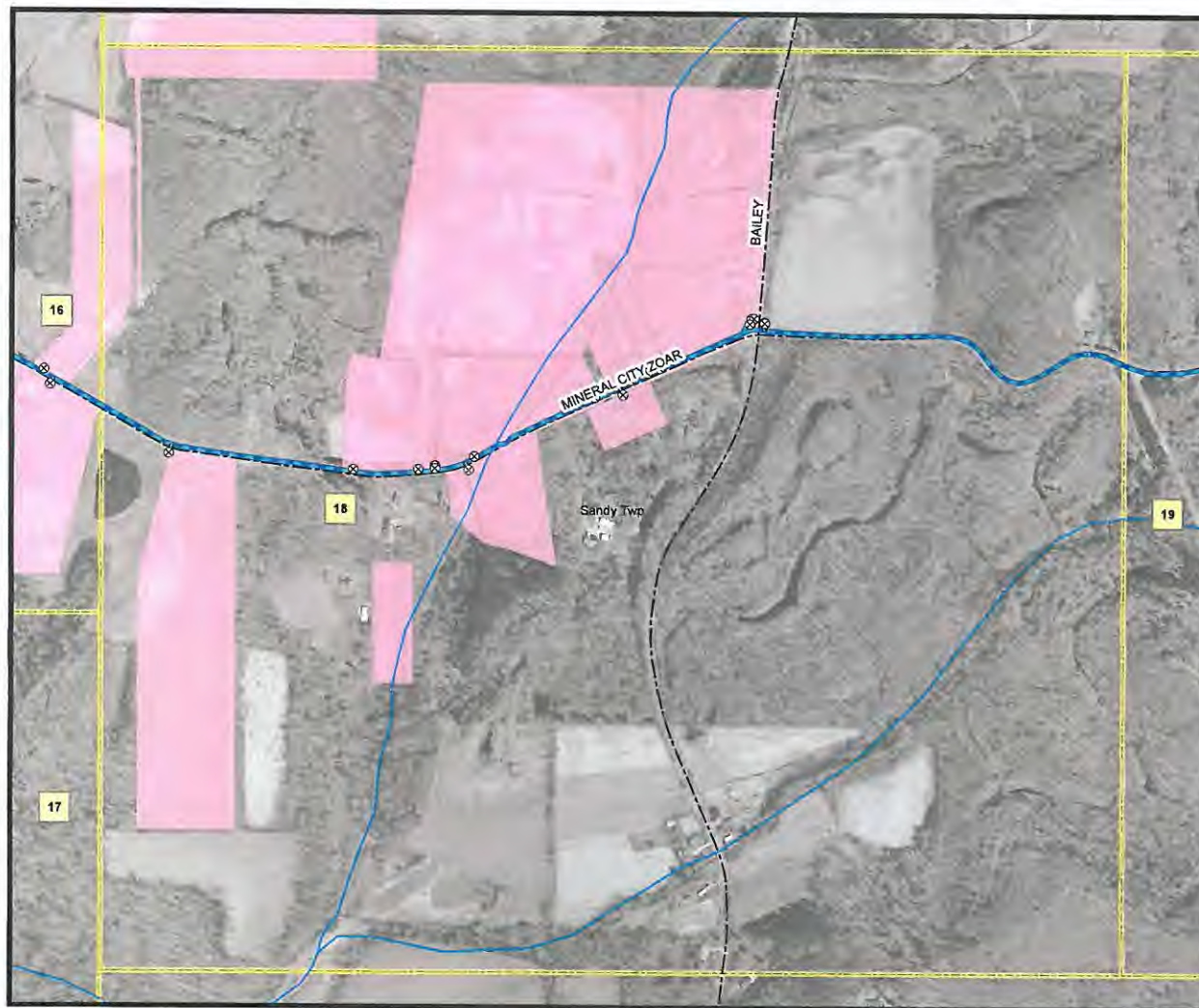
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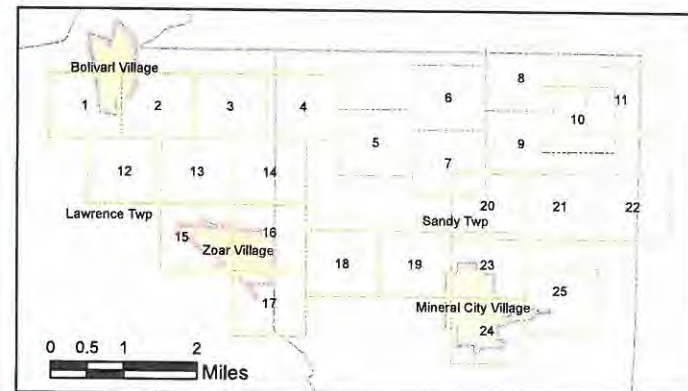
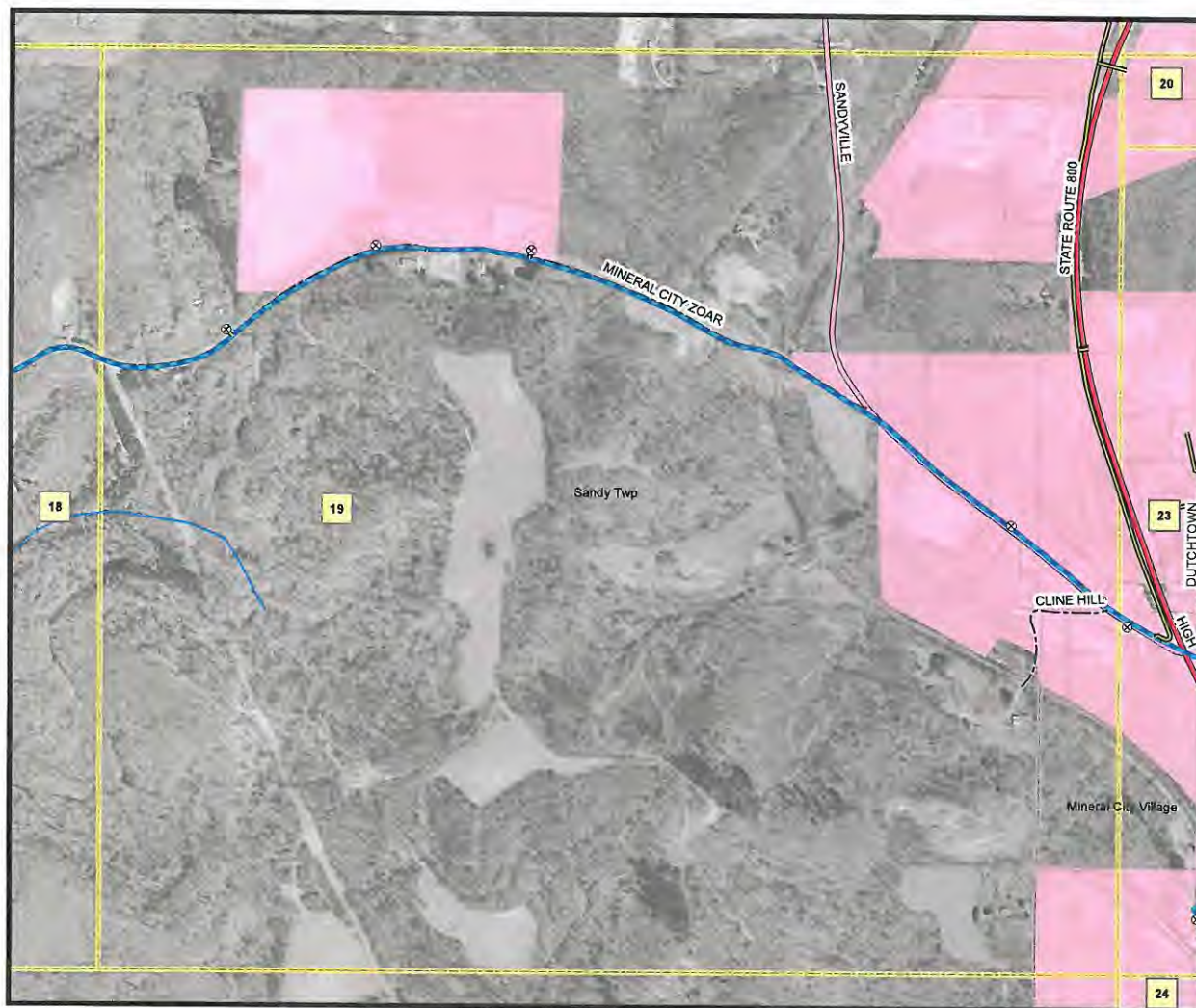
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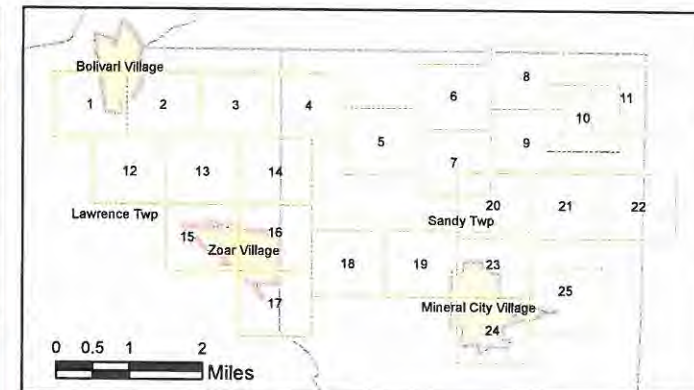
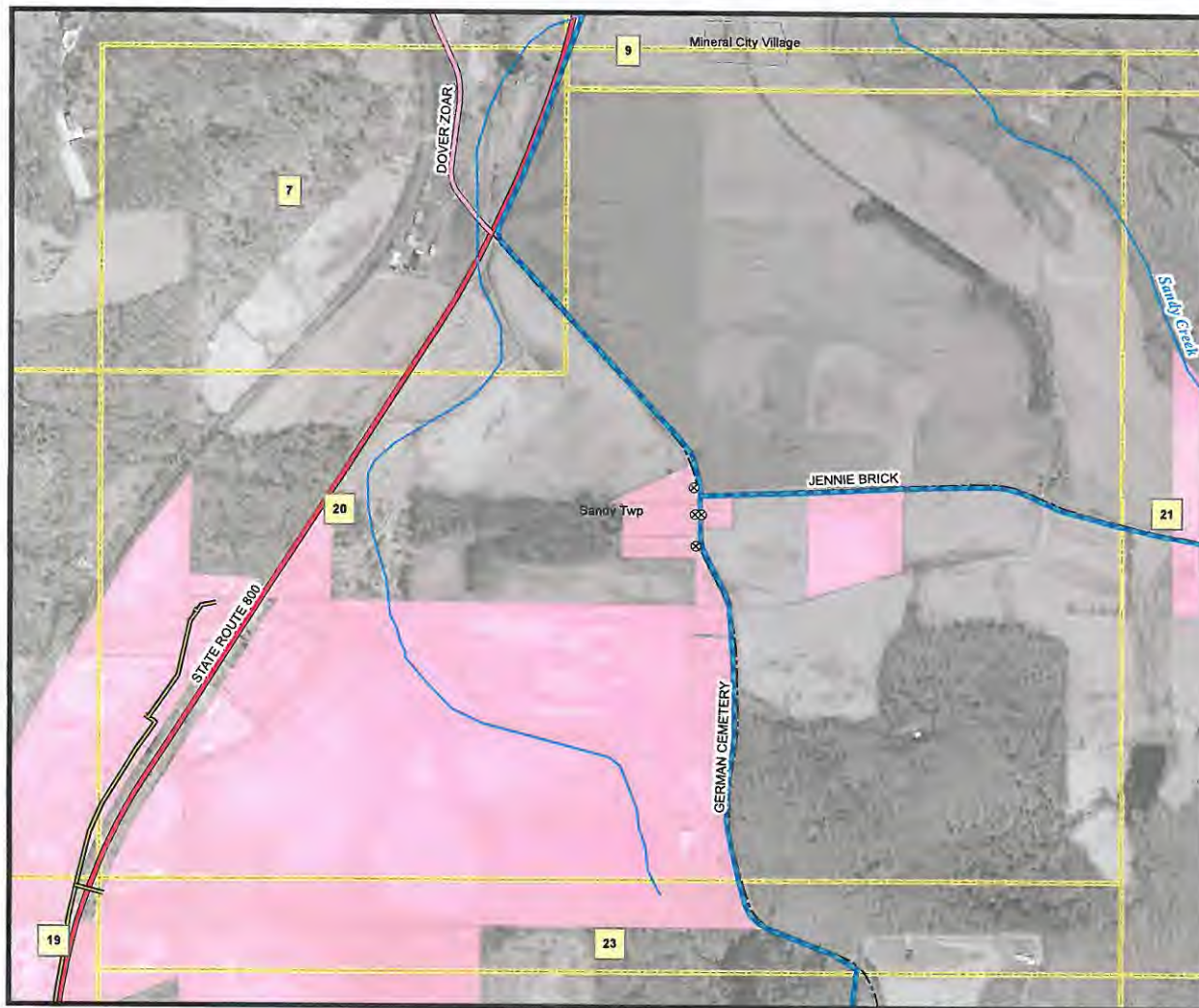
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Parcels

Lead Risk Factor

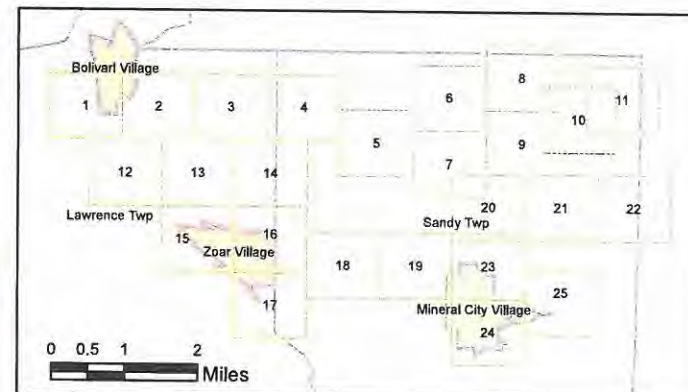
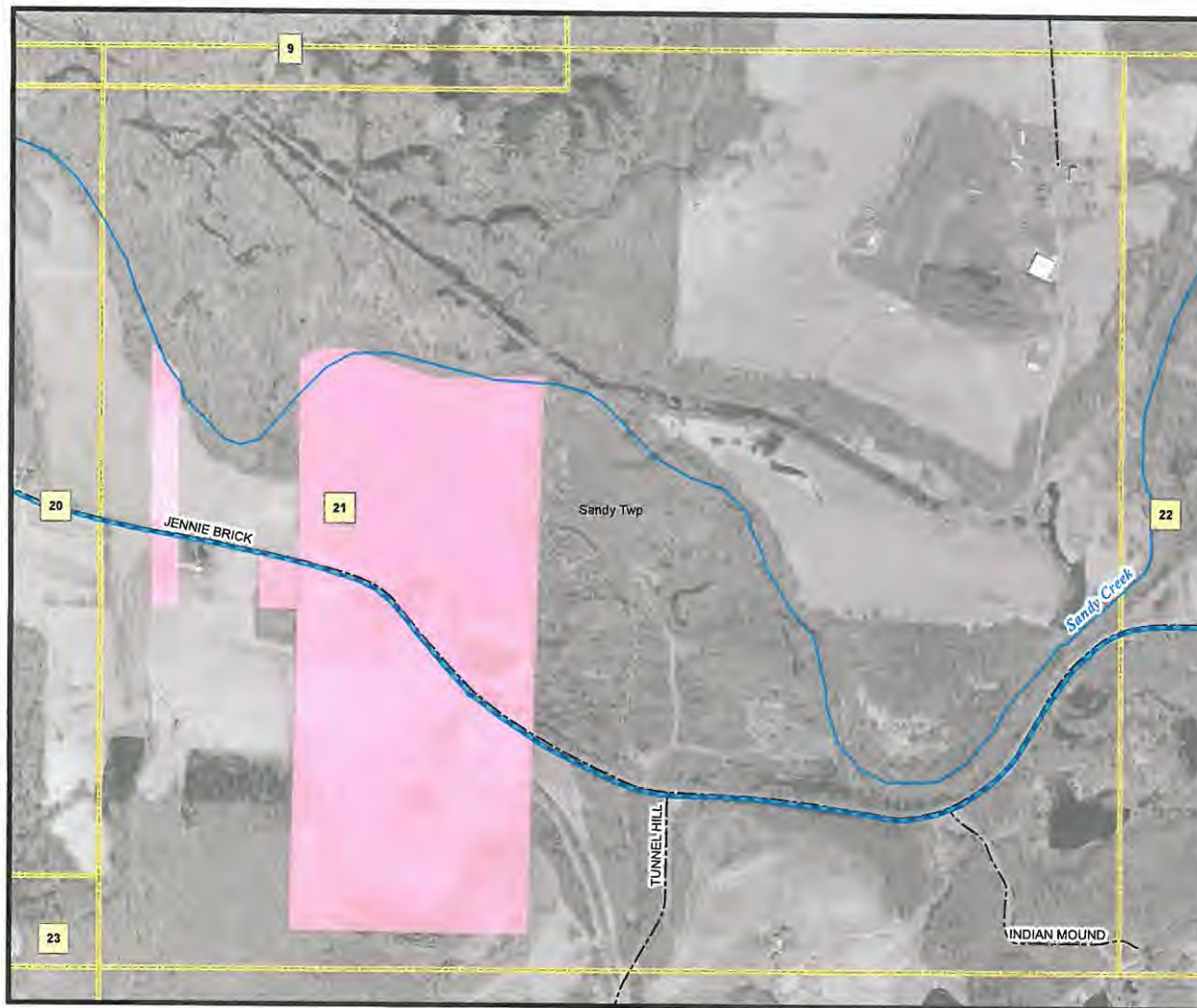
- High (Building Constructed before 1988)
- Low (Building Constructed after 2014)
- Medium (Building Constructed between 1988 & 2014)

Mapping is based upon NAD 83 - State Plane Coordinate System

0 300 600 1,200
Feet

Tuscarawas County Metropolitan Sewer District Wilkshire Hills Community Water System Lead Mapping





Legend

- ⊗ Water Curb Stop Valves
- TUS157_HYDRO_RIVER
- Service Line (Non Lead)
- Water Mains

Streets and Highways

- Municipal/Township Roads
- County Roads
- State/Federal Highways
- Wilk_Index

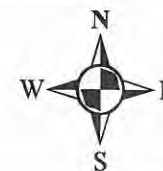
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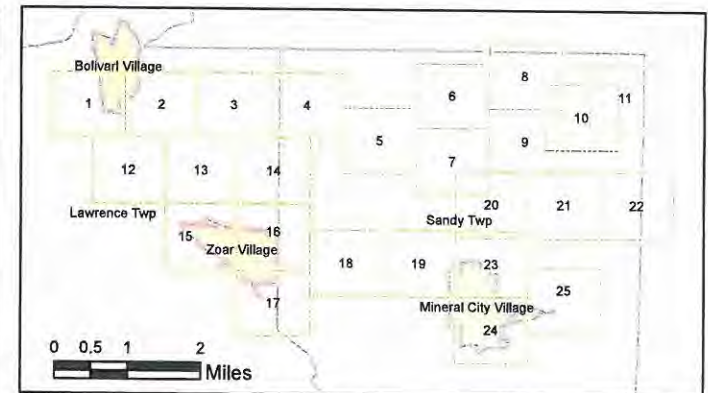
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Tuscarawas County Metropolitan Sewer District Wilkshire Hills Community Water System Lead Mapping





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Parcels

Lead Risk Factor

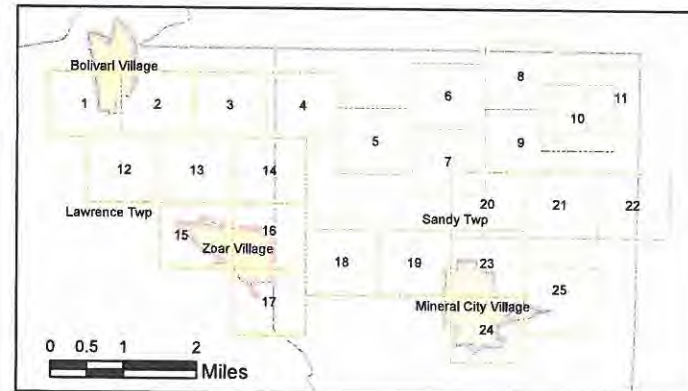
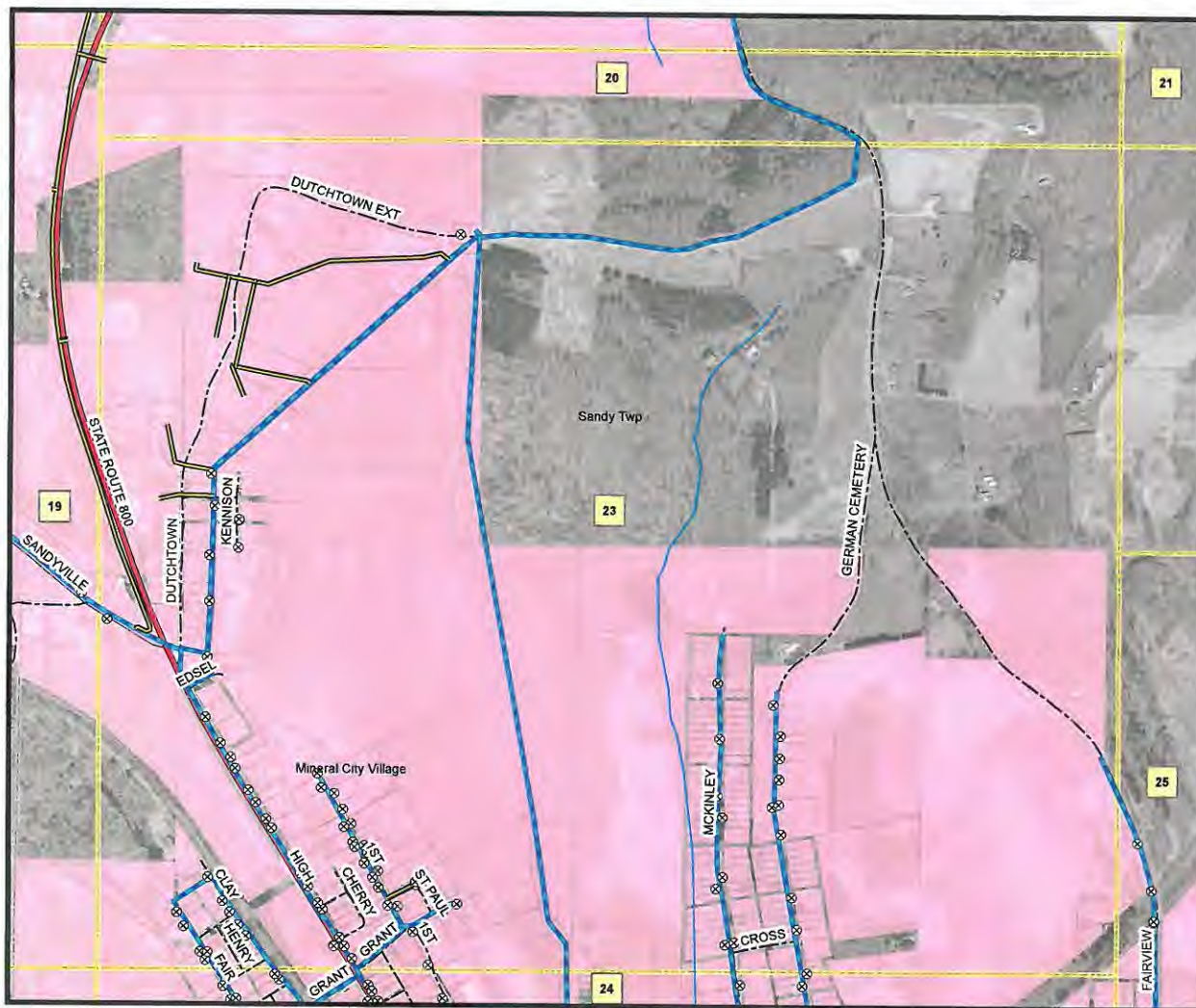
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0 300 600 1,200
Feet

Tuscarawas County Metropolitan Sewer District Wilkshire Hills Community Water System Lead Mapping





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Parcels

Lead Risk Factor

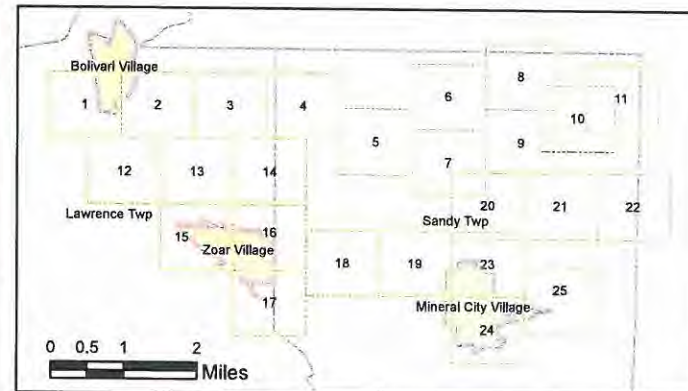
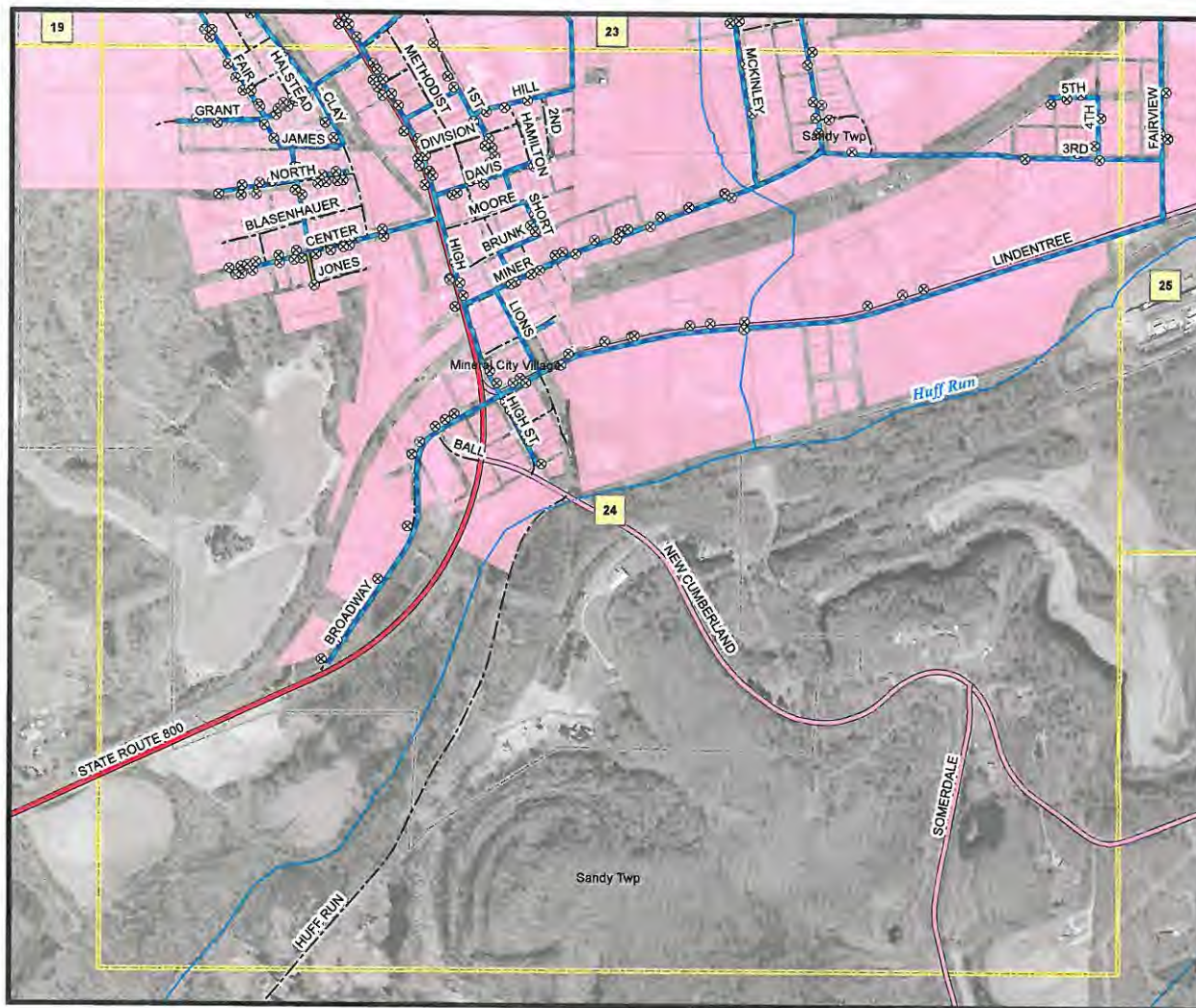
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Feet

Tuscarawas County Metropolitan Sewer District Wilkshire Hills Community Water System Lead Mapping





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Streets and Highways

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Parcels

Lead Risk Factor

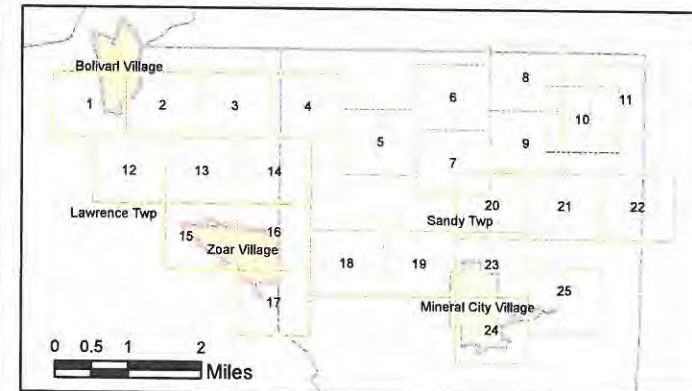
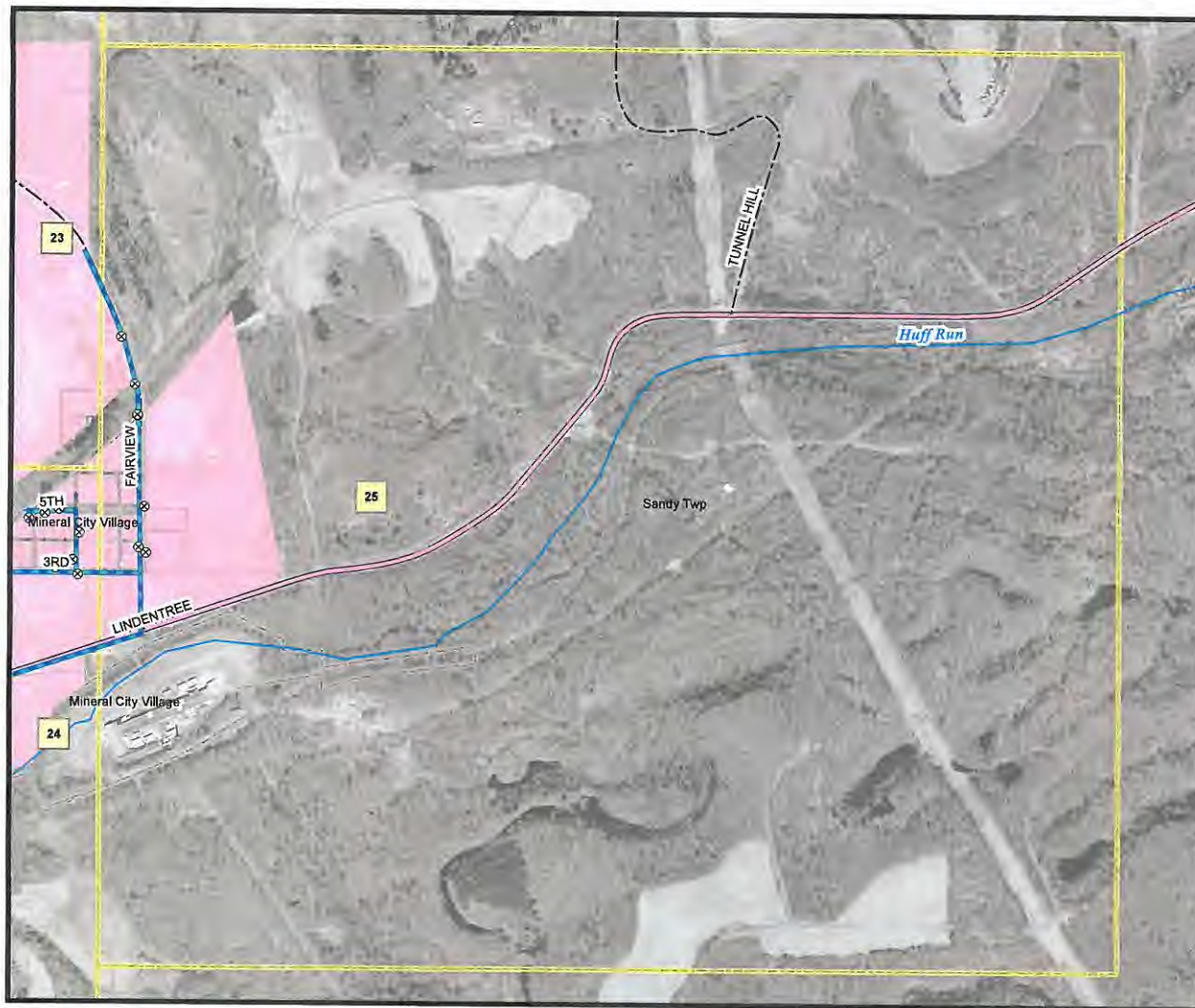
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- Medium (Building Constructed between 1988 & 2014)

Mapping is based upon NAD 83 - State Plane Coordinate System

0 300 600 1,200
Feet

Tuscarawas County Metropolitan Sewer District Wilshire Hills Community Water System Lead Mapping





Legend

- ⊗ Water Curb Stop Valves
- TUS157_HYDRO_RIVER
- Service Line (Non Lead)
- Water Mains

Streets and Highways

- Municipal/Township Roads
- County Roads
- State/Federal Highways

Wilk_Index

Parcels

Lead Risk Factor

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0 300 600 1,200
Feet

Tuscarawas County Metropolitan Sewer District Wilkshire Hills Community Water System Lead Mapping

