



Public Water System Lead (Pb) Components

PWS# OH -7603012

Prepared March 2017

To comply with Section 6109.21 of the Ohio Revised Code, enacted in September 2016, The City of Louisville, in Stark County, Ohio has created the following report and attached maps to identify known and potential components of its public water system that contain lead (Pb).

RCAP staff and the Louisville water department met on February 21st, 2017 to review possible presence of lead in the service area. Few applicable historical maintenance and operational records were available to be consulted along with limited as-built construction maps. Operators with extensive experience and knowledge of the system were present to provide firsthand accounts of the system. Existing mapping and historical maintenance knowledge are the basis of the institutional memory for the water distribution system. Lead component findings were identified by Louisville water operators and recorded in a GIS database.

Service Lines and Ownership

The Louisville water department distributes water to approximately 3,600 customers. The system owns and maintains service lines from the water distribution mains to the curb stop valves. The length of service line from the curb stop valve into the water meter is owned and maintained privately by the property owner. The majority of publicly owned and the privately owned portions of service line are a mix of copper and galvanized steel. While the system dates back to the early 1930's, no lead service lines have ever been discovered and water department staff members do not believe any exist in the system.

Since the earliest construction of the water system, it has been standard procedure for the water system operators to use $\frac{3}{4}$ " to 2" copper from the tapping saddle on the main up to the curb stop. It is recommended that property owners install copper or CTS plastic for private water service lines, but there are no official regulations to legally enforce this within the village. Copper, PVC, and galvanized pipe have been used for private lines; lead pipe has never been found in this water distribution system. While it is possible that some private service lines were constructed using lead lines, experienced operators currently in charge of maintaining the water distribution system have done replacement projects and repair work in all areas of the village and never uncovered any service line made of lead. Based on institutional knowledge and available maintenance records, the City of Louisville considers the chance of the existence of lead service lines to be minimal, and believes all of its customers to have a very low probability of having a lead service line. Areas where service lines come off the few remaining cast iron mains have a slightly higher chance of having lead, however, the probability is still considerably low in these areas. The attached map shows the probability of each service address having a lead water service line.

Distribution System

Louisville Water produces treated ground water and distributes potable water through approximately 52.5 miles of water main lines. The water distribution system was constructed between the early 1930s and 2015. The system was constructed using copper, cast iron, ductile iron, and c909 PVC water pipe (all piping between 1 ¼" and 12"). It is not believed that any of the cast iron (or any other pipe material contains leaded joints. Joints observed throughout the system use either a rubber gasket or mechanical joint to ensure a tight seal between lengths of pipe. Much of the original cast iron has been replaced and all new construction is done using PVC c909 plastic pipe. Louisville does not currently have need to treat for corrosion prevention, based on water stability testing results.

Water Meters and Indoor Plumbing

None of the customer water meters are believed to contain lead. An estimated 90% of all meters have been replaced within the last 15 years using with new Sensus brand models that conform to lead component standards (all components less than or equal to 8% lead).

Buildings in Ohio built prior to 1998 or that use plumbing material or solder manufactured before 1998 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 1998. 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 however that, although prohibited, some use of leaded solder or leaded components may have occurred after the prohibitions became effective.

The City of Louisville does have any local laws or regulations that ban the use lead for residential plumbing before state or federal statutes. Stark County auditor's records indicate less than 15 properties are known to have structures built since 2014, and therefore nearly all buildings in the village may have some lead in the solder or fixtures. Many of the buildings in Louisville have been renovated since their original construction. Since records are difficult to obtain for older renovation projects, the village is encouraging its residents to inspect their plumbing and report any potential lead to the water department.

Customer Self-Reporting

The information on this map regarding privately owned service lines is based on the limited information from the water system staff and Stark County building and parcel data. Property owners are encouraged to inspect their own service lines entering the building if these are in anyway exposed, and notify the City of Louisville water department if they have determined whether or not a lead service line exists. Please contact the Louisville water billing office by calling (330) 875-5644, or emailing utilitybilling@louisvilleohio.org. A representative from the water department will contact you to confirm and update this information for the next map release.

Contacts and Resources

If you have questions about known and potential lead components within the City of Louisville Public Water System, please contact:

Louisville Water Billing Office

Phone (330) 875-5644

Email utilitybilling@louisvilleohio.org

For more information about lead service lines and their removal, we recommend the following resources:

- **The Lead Service Line Replacement Collaborative**
<http://www.lslr-collaborative.org/resources-for-concerned-consumers.html>
- **Ohio EPA 'Learn About Lead' page**
<http://epa.ohio.gov/pic/lead.aspx>
- **US EPA Lead in Drinking Water Information Page**
<https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>

City of Louisville Public Water Distribution System Lead Components and Lead Service Lines Map

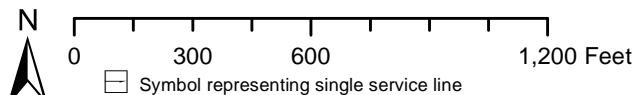
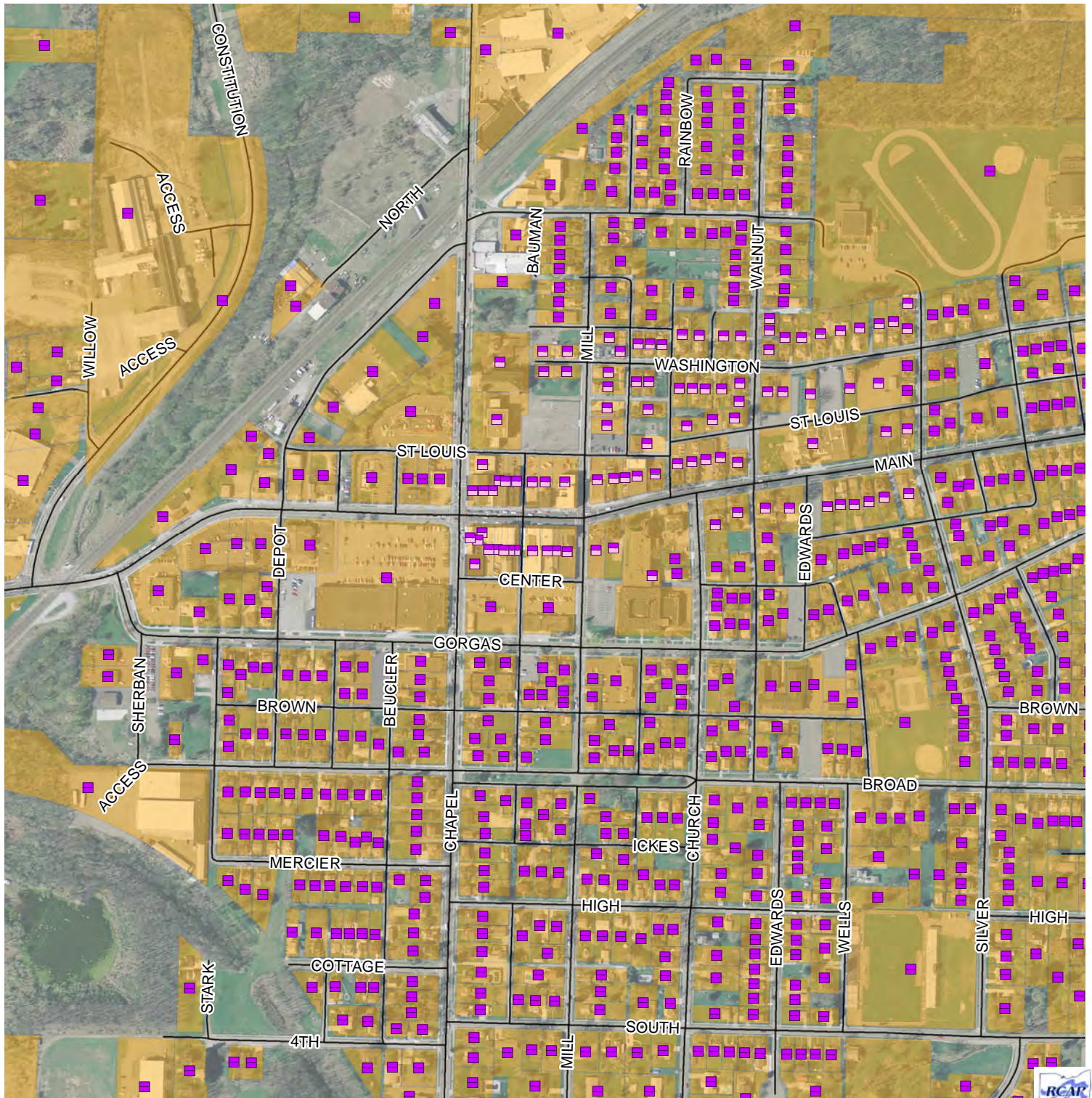
The following map(s) does not verify the presence of lead in any of the lines or structures shown. This map only shows the probable or possible locations based on the year that the structure was built, historical maintenance and operation records, and customer or utility staff verification.

This map is not intended for design engineering, surveying, or construction purposes. Information and data contained or accessed within this map emanates from various public and private sources and may contain errors and omissions

All data, information and documentation within this map are provided "as is" without warranty of any kind, either expressed or implied. The suitability of the data and information contained in this map is not guaranteed, and the user assumes all risk for such uses. WSOS Community Action and its employees, affiliates, agents and licensors cannot and do not warrant the accuracy, completeness, non-infringement, merchantability or fitness of any information contained within this map.

GIS Data Sources: OGRIP, OSIP, Stark County Auditor, Stark County GIS, RCAP GIS. Datum/Projection: NAD 1983 Ohio State Plane North (ft) Date: 3/6/2017

City of Louisville, OH Probability of Lead Service Lines in Water Distribution System



Symbol representing single service line

Ownership of Line
Public
Private

Probability of Lead Service Line
Determined by historical records

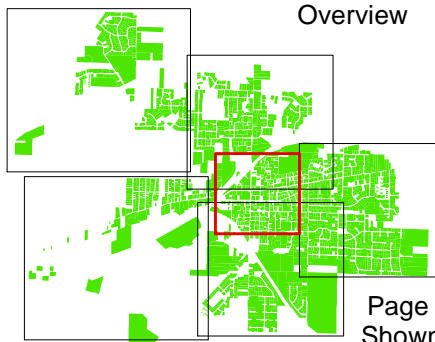
Moderate
Low

Material of Service
Line Known

Lead
Non-Lead

Louisville Service Area

Service Area
Overview



Page
Shown
1 of 6

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By RCAP GIS Team
March 6, 2017

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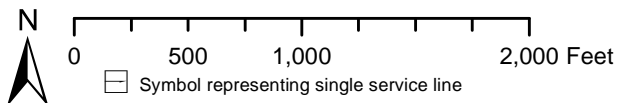
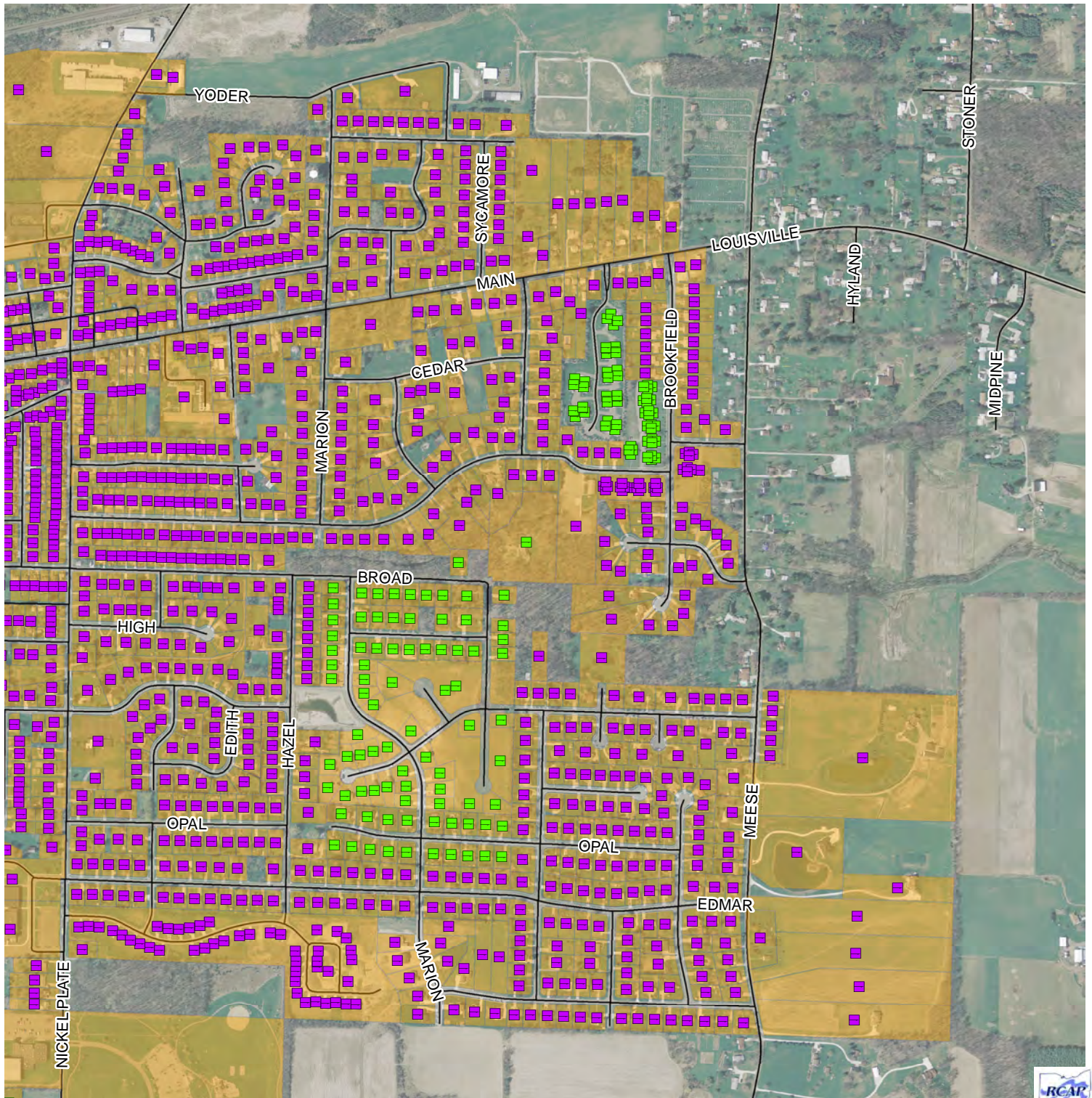
Coordinate System:

NAD 1983 StatePlane Ohio North FIPS 3401 Feet

Data Sources:

City of Louisville, Stark County, RCAP GIS Team, ESRI, OGRIP, OSIP, TIGER Lines

City of Louisville, OH Probability of Lead Service Lines in Water Distribution System



Symbol representing single service line

Ownership of Line
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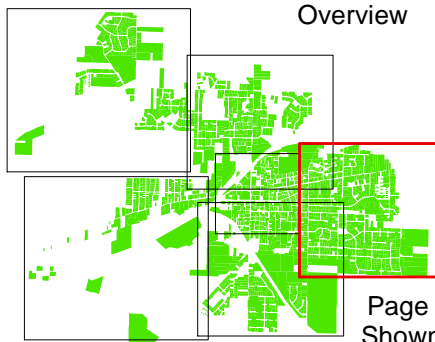
Moderate
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Louisville Service Area

Material of Service Line Known

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Service Area Overview



Page
Shown
2 of 6

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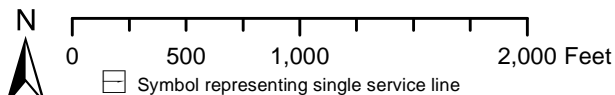
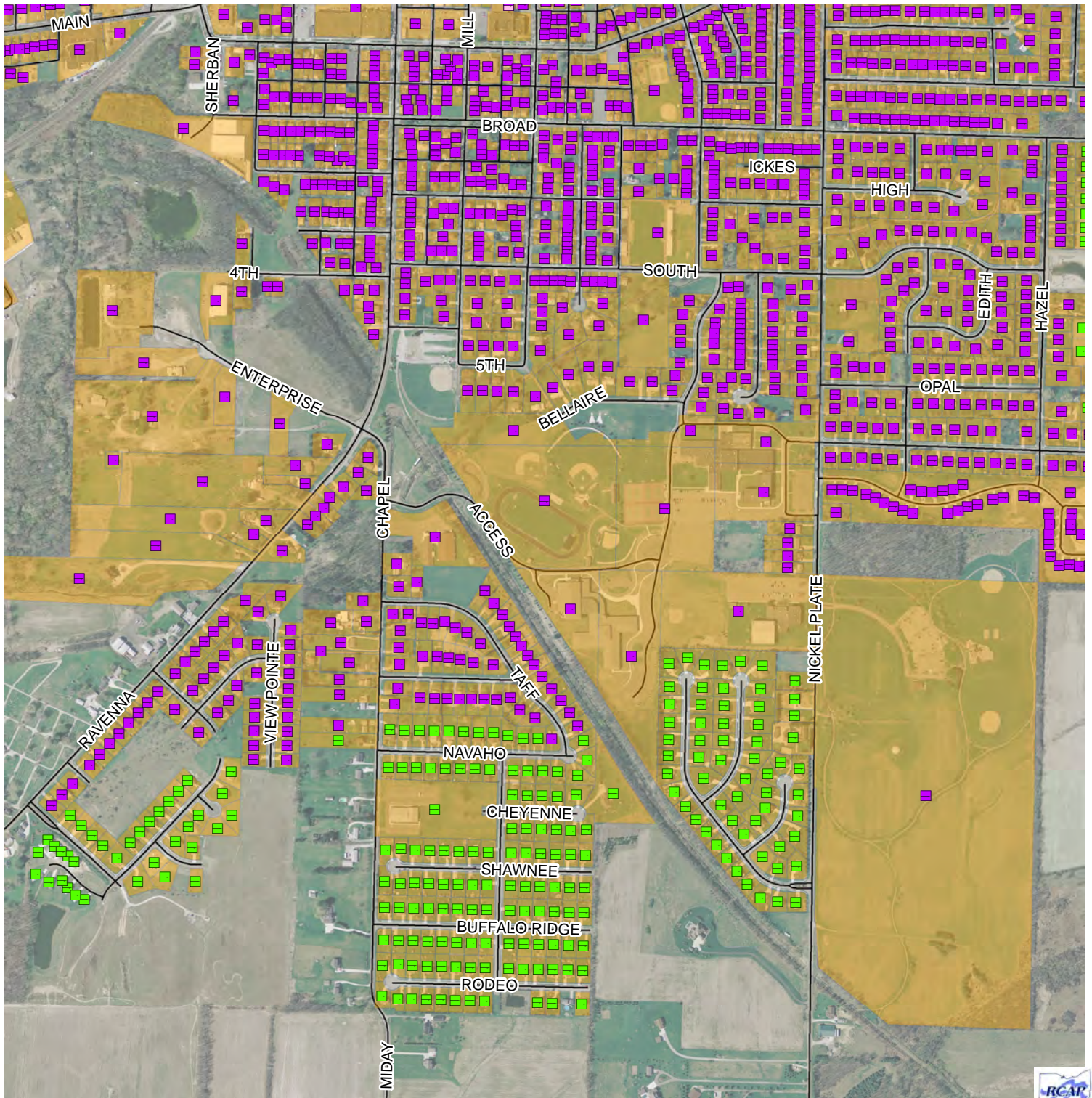
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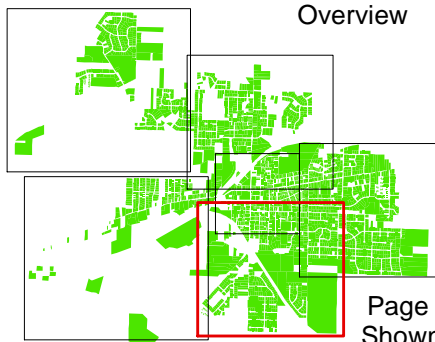
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Louisville Service Area

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Page
Shown
3 of 6

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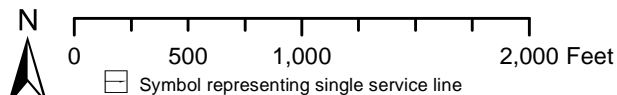
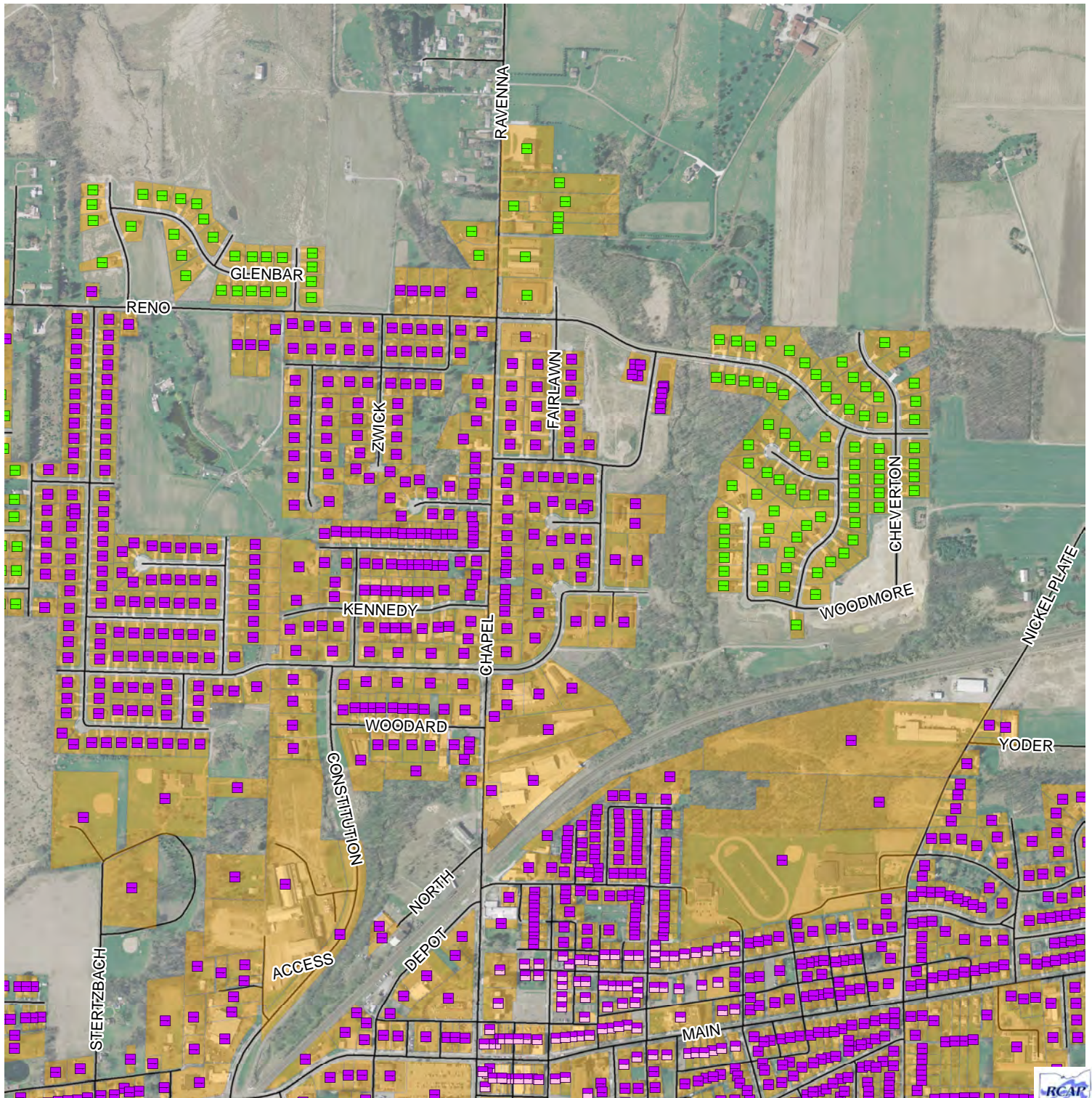
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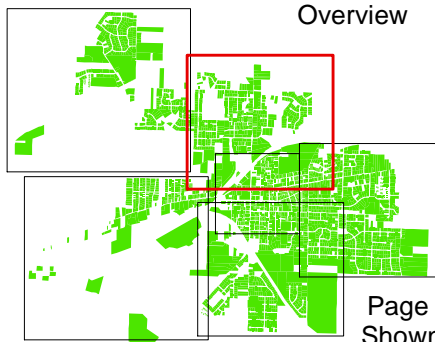
Moderate
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Material of Service Line Known

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Louisville Service Area

Service Area Overview



Page Shown
4 of 6

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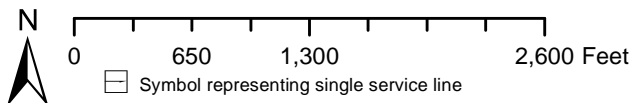
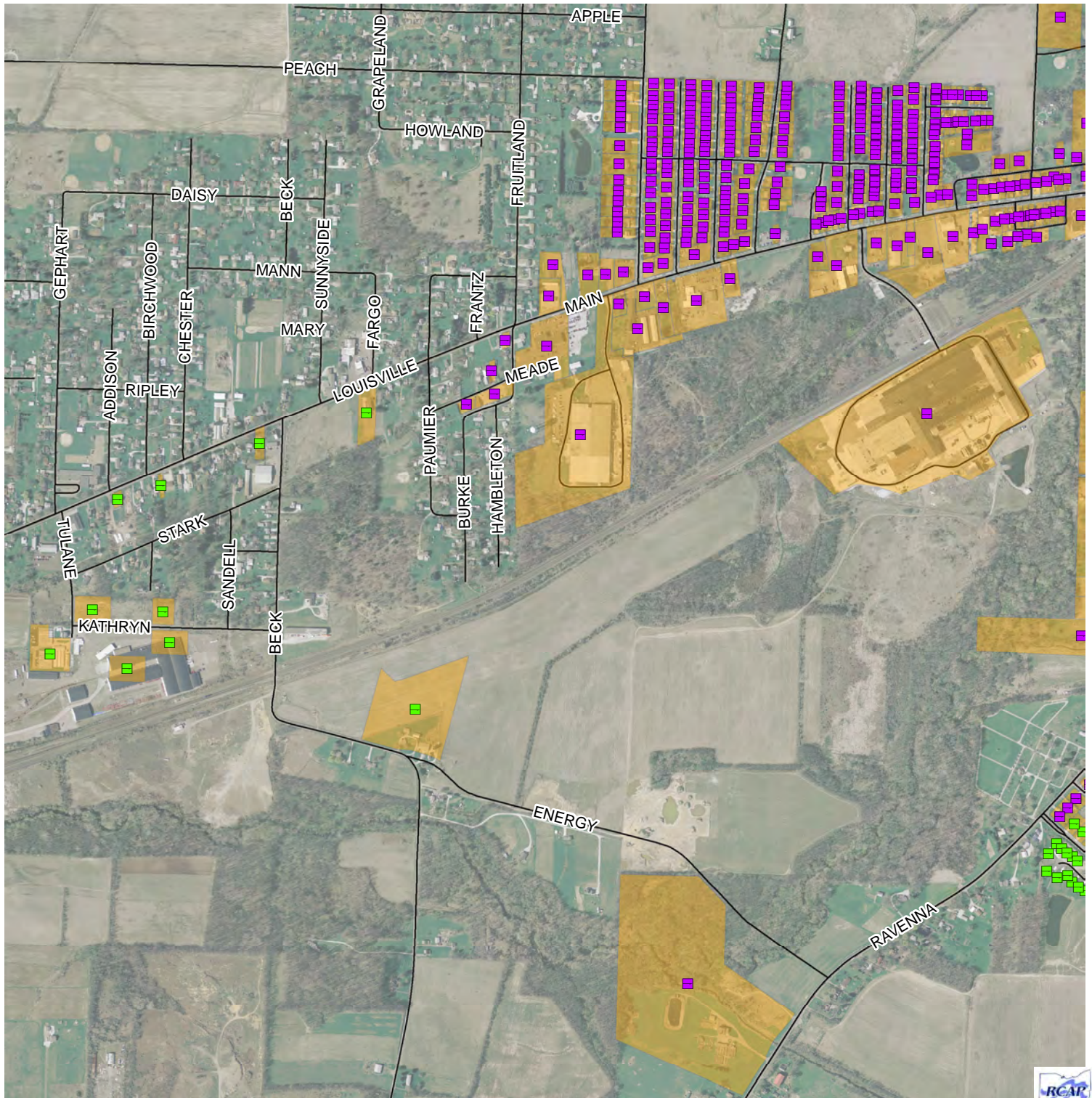
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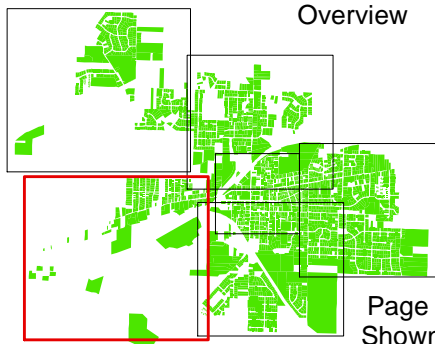
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Louisville Service Area

Service Area Overview



Page Shown
5 of 6



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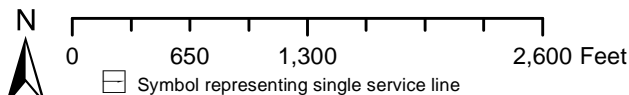
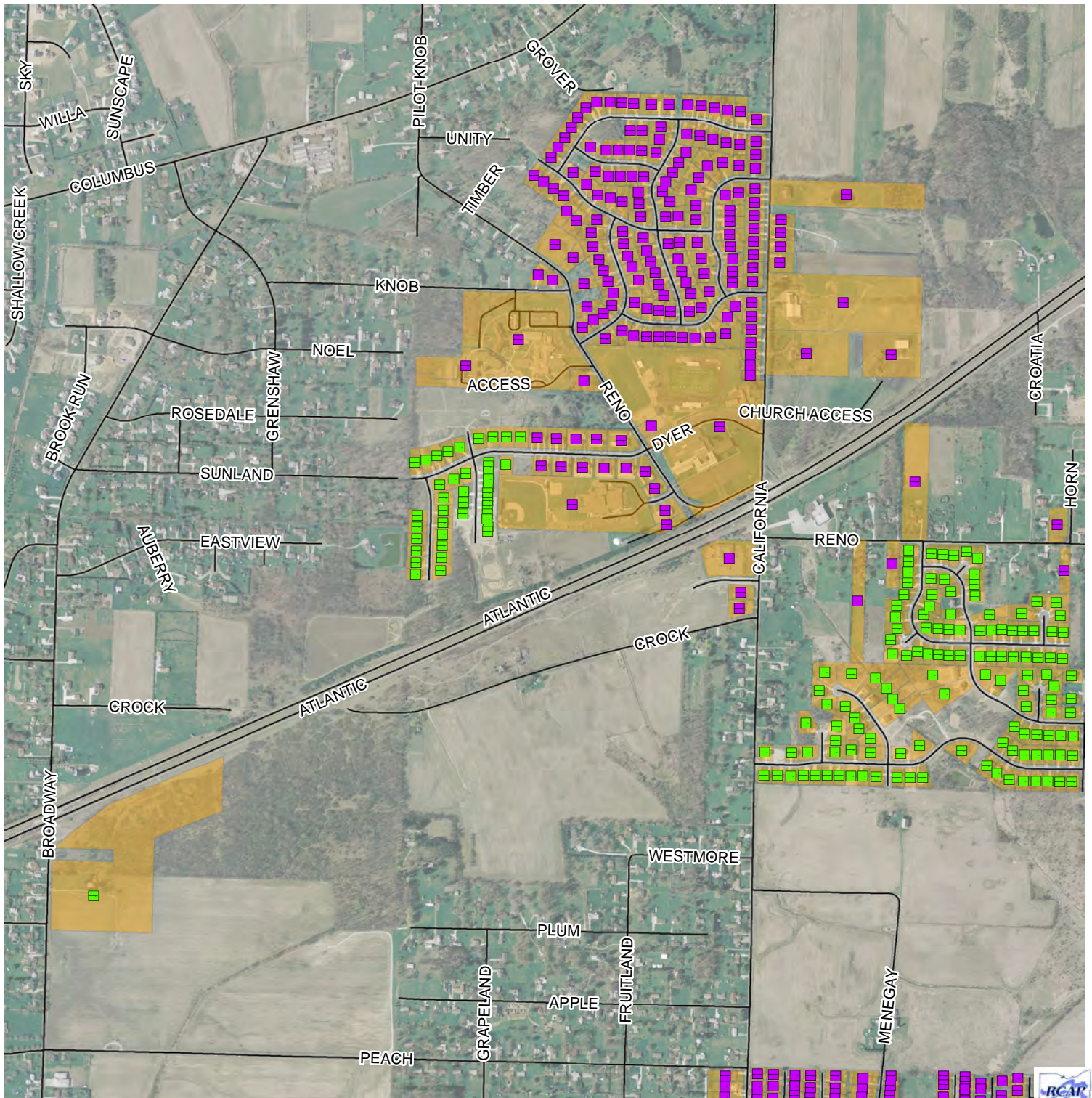
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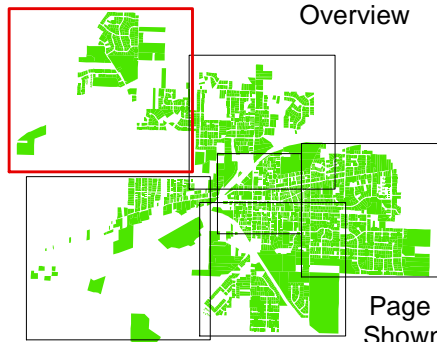
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Louisville Service Area

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Page
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6 of 6

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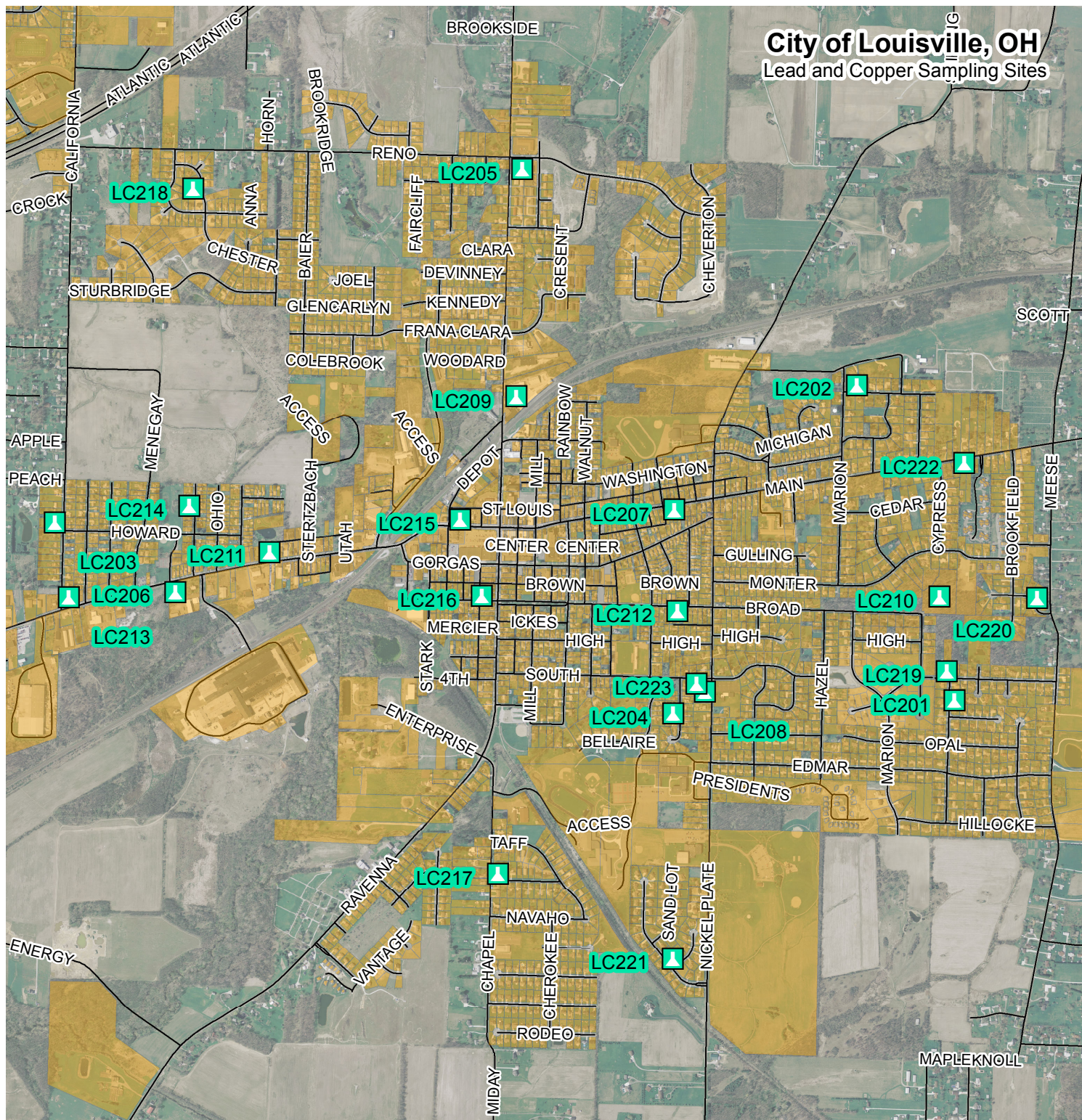
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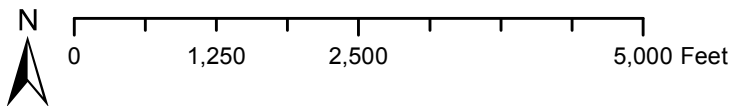
Data Sources:



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City of Louisville, OH Lead and Copper Sampling Sites



-  Lead & Copper Sampling Sites
-  Louisville Service Area

