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2019 Septic System Inventory

City of Baxter, MN

May 23, 2019

BMI Project B11.118460

Submitted by:
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Certification

For

2019 Septic System Inventory

City of Baxter, MN

BMI Project No. B11.118460

May 23, 2019

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

By: Bryan G. Drown

Bryan G. Drown, P.E.
License No. 41934

Date: May 23, 2019

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I. Introduction

A. General

In 1998, the Minnesota Pollution Control Agency Lake (MPCA) conducted a study to determine the effects of septic systems on ground water quality in residential areas of the City of Baxter. Baxter was experiencing growth and a sensitive aquifer underlies the City with numerous lakes in direct connection to ground water. Upon the completion of the study the City of Baxter developed a Capital Improvement Plan (CIP) to provide municipal sanitary sewer and water to developed areas. A Capital Improvement Plan Map dated April 2000 is included in Appendix A detailing areas served by municipal sewer and water in 2000 and areas of planned extensions of municipal sewer and water. Since 2000 the City of Baxter has worked to implement the CIP to extend municipal sanitary sewer and water to existing residential areas by working with residential and commercial developments such that new development is supported by municipal sanitary sewer and water. A map of the City of Baxter detailing the areas currently served by municipal utilities is included in Appendix A. The City of Baxter has identified six remaining residential neighborhoods that were developed with on-site wastewater treatment systems and private wells to be served by municipal sanitary sewer and water.

The primary focus of this study is to analyze the age, location, and condition of on-site treatment systems, based on city permit records, in these six residential neighborhoods.

II. Study Areas

The six study areas are as follows. A map of the study areas is included in Appendix B.

A. Area 1 – Olivewood Drive and Deerwood Road.

Area 1 consists of 21 developed parcels located on Olivewood Drive and Deerwood Road. 14 of the parcels are located on Lower Whipple Lake. Area 1 is currently zoned Low Density Residential (R-1).

B. Area 2 – Ashley Road, Baywood Road, Clearwater Road, Springwood Court, Springwood Drive, and Welton Road.

Area 2 consists of 60 developed parcels located on Ashley Road, Baywood Road, Clearwater Road, Springwood Court, Springwood Drive, and Welton Road. 12 of the parcels are located on Whipple Lake. Area 2 is currently zoned Special Residential/Cluster on Ashley Road and the remaining areas Low Density Residential (R-1).

C. Area 3 – Jadewood Drive, Jewelwood Drive, Lyndale Drive, Lyndale Lane, and Woida Road.

Area 3 consists of 57 developed parcels located on Jadewood Drive, Jewelwood Drive, Lyndale Drive, Lyndale Lane, and Woida Road. 13 of the parcels are located on Red Sand Lake. Area 3 is currently zoned Low Density Residential (R-1).

D. Area 4 – Eagle Drive and Eagle Ridge Drive

Area 4 consists of 18 developed parcels located on Eagle Drive and Eagle Ridge Drive. 8 of the parcels are located on the Mississippi River. Area 4 is currently zoned Low Density Residential (R-1).

E. Area 5 – Forestview residential neighborhood east of TH 371 and south of Highland Scenic Road and Highland Scenic Road from Camwood Trail to Berrywood Drive

Area 5 consists of 222 developed parcels. 55 of the parcels are located on the Mississippi River. The Forestview neighborhood is currently zoned Low Density Residential (R-1), the

north side of Highland Scenic Road is zoned Medium Density Residential (R-2), and the In-Fisherman property on the south side of Highland Scenic Road is zoned Office Space (OS).

F. Area 6 – Brentwood Circle

Area 6 consists of 11 developed parcels located on Brentwood Circle. Area 6 is currently zoned Low Density Residential (R-1) and is served by municipal water.

III. Wastewater Treatment

A. General

Residences in the six neighborhoods are currently not served by a centralized collection and treatment system. These establishments are served by individually owned on-site wastewater treatment systems. The following discussion will provide background information regarding on-site type systems.

B. History of On-Site Rules

Rules governing on-site sewage treatment are enforced at the County and City level in the State of Minnesota. In January of 1996, the Minnesota Pollution Control Agency (MPCA) adopted revised Chapter 7080 regulations for individual on-site wastewater treatment systems. The City of Baxter has adopted Chapter 7080 regulations.

The major difference between the previous rules and ordinances and the new 7080 rules is the interpretation of suitable soil conditions for the installation of an on-site system. In the past, the actual water table level was used as the main design factor. The new rules refer to utilizing soil coloring, texturing and permeability to estimate a seasonal high-water level rather than the actual water table at the time of exploration.

The current Chapter 7080 regulations for individual on-site wastewater treatment systems provide the minimum standards and criteria for individual sewage treatment systems to protect the surface and ground waters of the state, and promote the public health, safety, and general welfare. Chapter 7080 identifies three factors that define a failing on-site sewage treatment system. These three factors are as follows:

1. Any system that discharges sewage to a seepage pit, cesspool, drywell, or leaching pit.
2. Any system with less than three feet of soil or sand between the bottom of the distribution medium and the saturated soil level or bedrock.
3. Any system posing an imminent threat to public health or safety. "Imminent threat to public health or safety" means situations with the potential to immediately and adversely impact or threaten public health or safety. At a minimum, ground surface or surface water discharges, any system causing sewage backup into a dwelling or other establishment, and all cesspools constitute an imminent threat.

Existing systems that are identified as failing systems are required to be upgraded in accordance with the Chapter 7080 Code. Likewise, all new on-site sewage treatment systems or existing systems that are modified or replaced must be constructed to meet all of the Chapter 7080 Code regulations. Systems that are identified as an imminent health threat must be upgraded within 10 months or sooner depending on local ordinances.

C. Effective Life of On-Site Treatment System

With the appropriate maintenance, a properly designed and installed system can last approximately 25 to 30 years. After that, the drainfields tend to become overloaded as the biomat becomes thick and impedes the ability of water to pass through it. When a system has failed, it is necessary to find a new location to construct a new drainfield. Because the

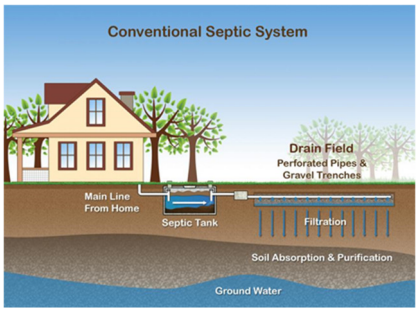
lifetime of an on-site system is limited, the age of the system is critical in predicting its remaining life expectancy. In addition, knowing the age of the system will indicate how the system was constructed, and indicate the likelihood of the system to be in compliance with the current codes. Prior to 1996, there was limited knowledge in the wastewater on-site treatment industry regarding soil suitability and in particular, in determining where the saturated soil level lies. Therefore, older systems are most likely "failing" systems in light of the fact that they would not meet the required three-foot separation distance, and thus are not providing adequate treatment.

IV. Existing Systems

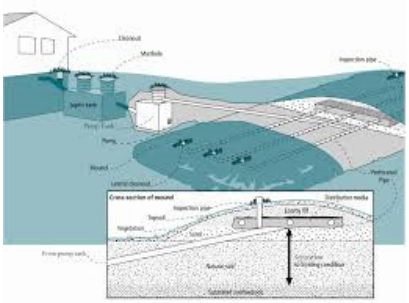
A. Type of Systems

City records show three types of on-site treatment systems have been installed.

- A septic tank and drainfield system consists of solids being collected in a septic tank and wastewater flows by gravity out of the septic tank to rock trenches and infiltrates into the ground.



- A mound system includes a septic tank and lift station that pumps wastewater to a mounded soil area. Mound systems are utilized in areas with high groundwater or bedrock to create the required vertical separation for treatment between the bottom of the mound and saturated soils or bedrock.



- A septic tank and pressure distribution system is like a septic tank and drainfield except a lift station is installed between the septic tank and drainfield and pumps the wastewater to the gravel infiltration area. This system is utilized in sandy soils to evenly distribute the wastewater throughout the entire trench area.

A breakdown of the type of on-site sewage treatment system for each area is as follows:

Type of Wastewater System				
	Septic Tank & Drainfield	Mound System	Septic Tank & Pressure Distribution System	No or Incomplete Records
Area 1	17	0	0	4
Area 2	38	7	6	9
Area 3	40	13	3	1
Area 4	13	0	0	5
Area 5	185	0	4	33
Area 6	9	1	0	1
Totals:	**302**	**21**	**13**	**53**

B. Septic System Age

As previously stated the lifetime of an on-site system is limited, the age of the system is critical in predicting its remaining life expectancy. In addition, knowing the age of the system will indicate how the system was constructed and the likelihood of the system to be in compliance with the current codes. Prior to 1996, there was generally very limited knowledge in the on-site treatment industry regarding soil suitability and in particular, in determining where the saturated soil level lies.

A list by address and maps for each area showing the year septic systems were installed is included in Appendix D. The life expectancy of a septic system is estimated to be 25 to 30 years and systems installed prior to 1996 (23 years old) are likely not in compliance with current codes. With these benchmarks in mind the age of existing systems for each area is:

Age of Septic Systems by Area			
	Average Age (Years)	Percentage of Systems Older than 23 Years	Number of Systems that have been Replaced (2nd Site)
Area 1	25.3	62.5%	1
Area 2	20.0	32.7%	12
Area 3	19.8	29.4%	9
Area 4	21.5	45.5%	0
Area 5	21.3	36.5%	10
Area 6	29.0	87.5%	0
Totals:	**21.2**	**38.0%**	**32**

Overall the number of septic systems broken down by age is:

No. of Septic Systems by Age		
Age of Septic Systems		**%**
0 – 15 Years	48	14.3%
15 - 20 Years	93	27.7%
20 - 25 Years	115	34.2%
25 - 30 Years	52	15.5%
30 - 40 Years	27	8.0%
40 – 50 Years	1	0.3%
Total:	**336**	**100.0%**

The number of septic systems broken down by age for each area is:

No. of Septic Systems by Age and Area						
Age of Septic Systems	**Area 1**	**Area 2**	**Area 3**	**Area 4**	**Area 5**	**Area 6**
0 – 15 Years	1	12	9	1	25	0
15 - 20 Years	3	19	15	3	52	1
20 - 25 Years	5	10	15	5	79	1
25 - 30 Years	1	11	11	1	27	1
30 - 40 Years	6	2	1	1	13	5
40 – 50 Years	0	0	0	0	1	0

C. Septic System Location

Base maps of each area are in Appendix E. Base maps include right of way and lot lines, aerial photo, location of existing septic systems, and setback requirements. The location of the septic systems is based on sketches provided by system designers and installers as part of the permit application.

The Natural Resources Conservation Service (NRCS) soils survey lists soils in the study areas as uniformly well-draining. Portions of Area 2 and 3 are noted to have high groundwater levels. This is supported by 20 of the 21 mound systems that have been installed being in Areas 2 and 3.

The Shore Land Overlay District in the City of Baxter is defined as lands located within one thousand feet (1,000') of the ordinary high-water mark of a lake or three hundred feet (300') of a river or stream. A portion of all six neighborhoods are located within the Shore Land Overlay District. The number of septic systems the City of Baxter has record of located in the Shore Land Overlay District is:

Septic Systems within Shore Land Overlay District			
	Number of Septic Systems within Shore Land Overlay District	Total Number of Septic Systems	Percentage within Shore Land Overlay District
Area 1	16	17	94%
Area 2	24	51	47%
Area 3	36	56	64%
Area 4	4	13	31%
Area 5	45	189	24%
Area 6	6	10	60%
Totals:	**131**	**336**	**39%**

D. Septic Tank Sizing

The City of Baxter has adopted regulations related to septic tanks that differ from the Chapter 7080 Code. City Code 9-8-18.4 mandates the minimum size of a septic tank shall be 1,500 gallons and have an effluent filter on the last baffle. Requiring a larger septic tank with a filter was enacted to protect against waste particles leaving the septic tank and traveling to the drainfield area which could prematurely clog the system.

Many of the existing septic systems were installed prior to this ordinance revision. City records show 285 of the 389 systems have a pre-existing non-conforming condition as the septic tank has a volume less than 1500 gallon or there is no record of the size of the septic tank installed. Exhibits showing properties with septic tanks with volume less than 1,500 gallons are located in Appendix F.

V. Well Data

A. Minnesota Department of Health

Private well data was gathered from the Minnesota Department of Health database. As the locations of the wells provided is only considered accurate to within 30 feet the well locations are not included on the project base maps. The data provided the depth of each well with a deep well defined by having a depth greater than 50’ and a shallow well having a depth less than 50’. Well depths are listed by address in the database in Appendix D and exhibits showing parcels with shallow wells or deep wells are located in Appendix G.

The depth of wells is important related to on-site septic systems siting as a deep well must be located at least 50' from a septic system and a shallow well at least 100' from a septic system. A shallow well is also more susceptible to contamination, particularly in Baxter that has uniformly sandy soils and sensitive aquifer.

The Department of Health Well Index includes water quality records taken at the time the private well is drilled. Water samples were taken and analyzed for the level of nitrates prior to wells being put in service. The drinking water standard, or safe level, for nitrates is 10 milligrams per liter. From the well index data two wells in Area 5 noted elevated nitrate levels. It appears both wells were not put in service, due to the elevated nitrate levels, as additional wells were drilled in these locations.

Well #604157 is located at the south end of Area 5 near the intersection of Forestview Drive and Parkwood Road. This well had a nitrate level of 8.88 mg/l.

Well #785793 is located at the north end of Area 5 on Camwood Trail east of Scenic River Drive. This well had a nitrate level of 18.9 mg/l.

VI. Summary

According to City records there are 389 on-site sewage treatment systems in the six residential neighborhoods. Of these 389 systems the City has record of 336 installations. City records show that 126, or 38%, of the on-site sewage treatment systems were installed prior to 1996 and the revision to the Chapter 7080 regulations. On average Areas 1 and 6 have the oldest systems with 62.5% and 87.5% of the systems installed prior to 1996.

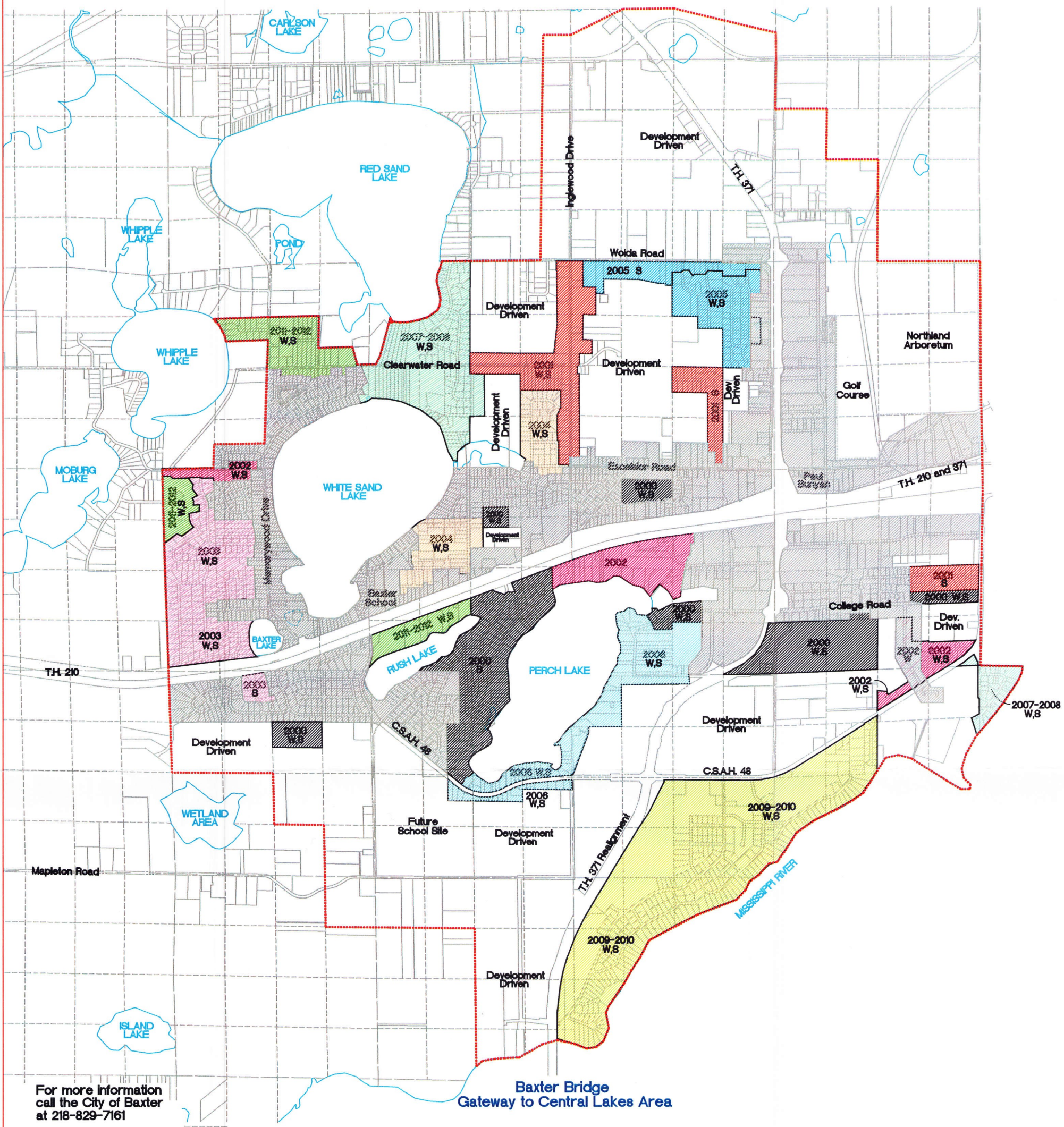
The effective life of an on-site sewage treatment system is estimated to be 25 – 30 years. Currently 80, or 24%, of the systems are older than 25 years. 208, or 62%, of systems are 15 to 25 years old which corresponds to a period of growth in the City between 1994 and 2004. As time passes more and more systems will reach their average effective life and more likely need replacement. In five years 195, or 58%, of the systems will be older than 25 years and in ten years 288, or 86%, of the systems will be older than 25 years.

If replacement of the existing on-site septic system is necessary the current cost estimate to install a new septic tank and drainfield system is between $6,500 and $9,500 and the cost estimate to install a new mound system is between $10,500 and $16,000.

Appendix A: 2000 CIP Map & Current Utility Service Area Map

City of Baxter - Heart of the Central Lakes Area

Water and Sewer 10 Year Capital Improvements Plan



For more information call the City of Baxter at 218-829-7161

Utility Service Boundary

Currently Served

Work Plan in Process

- 2000
- 2001
- 2002
- 2003
- 2004

Planned Future Areas

- 2005
- 2006
- 2007-2008
- 2009-2010
- 2011-2012

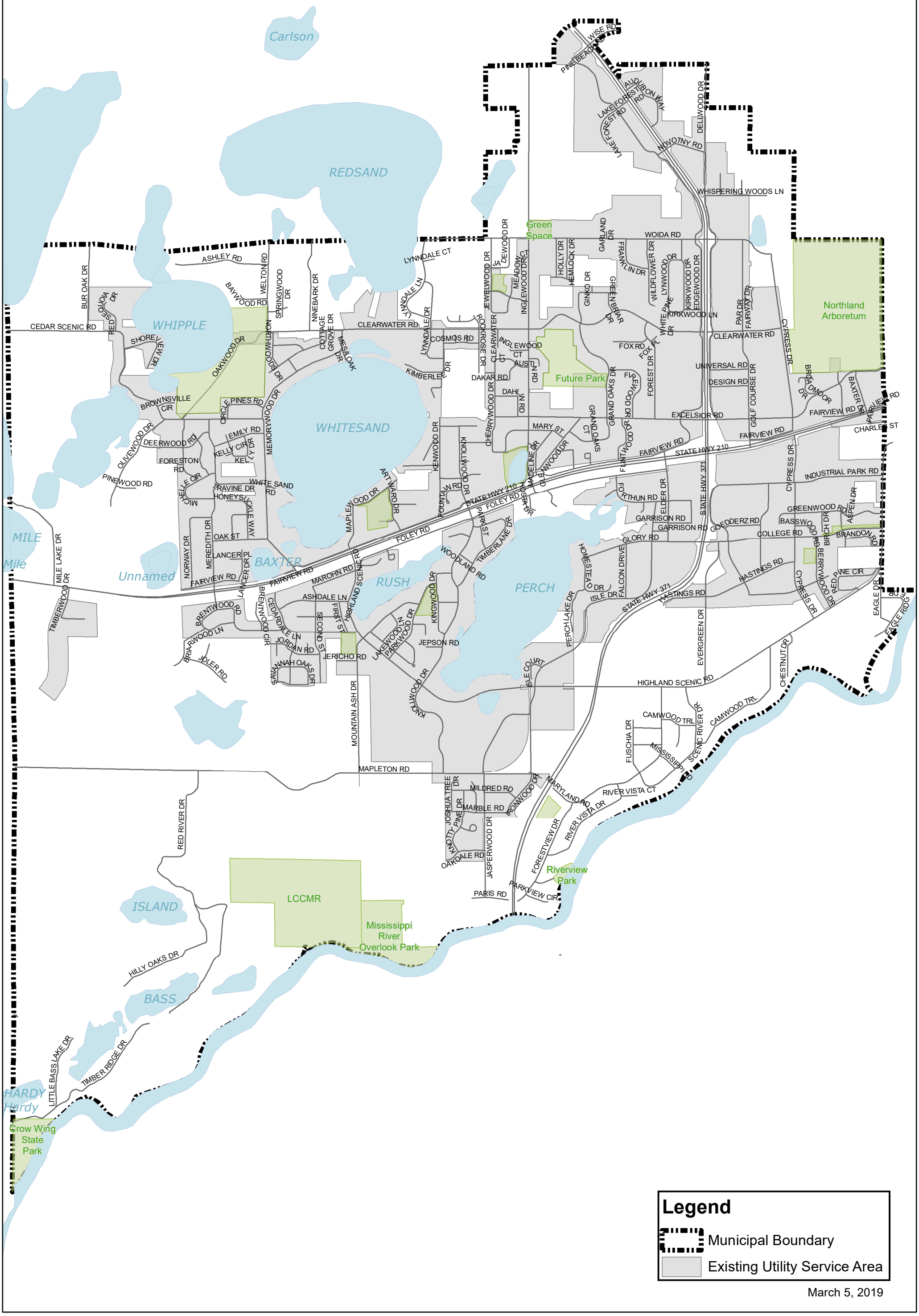
W - WATER IMPROVEMENTS ONLY
S - SANITARY SEWER IMPROVEMENTS ONLY
W,S - WATER + SANITARY SEWER MPROVEMENTS

NORTH

SEWER AND WATER MAP
April, 2000

NOTE: Areas shown are approximate and intended to show general boundaries only. Specific parcels included in potential project areas will only be identified following preparation of detailed studies conducted during work plan periods. Some areas already have either sewer or water. The map denotes those and otherwise show both sanitary sewer and water to be installed.

Existing Utility Service Area



Legend

- Municipal Boundary
- Existing Utility Service Area

March 5, 2019

Appendix B: Study Area Map

Septic System Inventory

City of Baxter, MN

Septic Service Areas

May 2019

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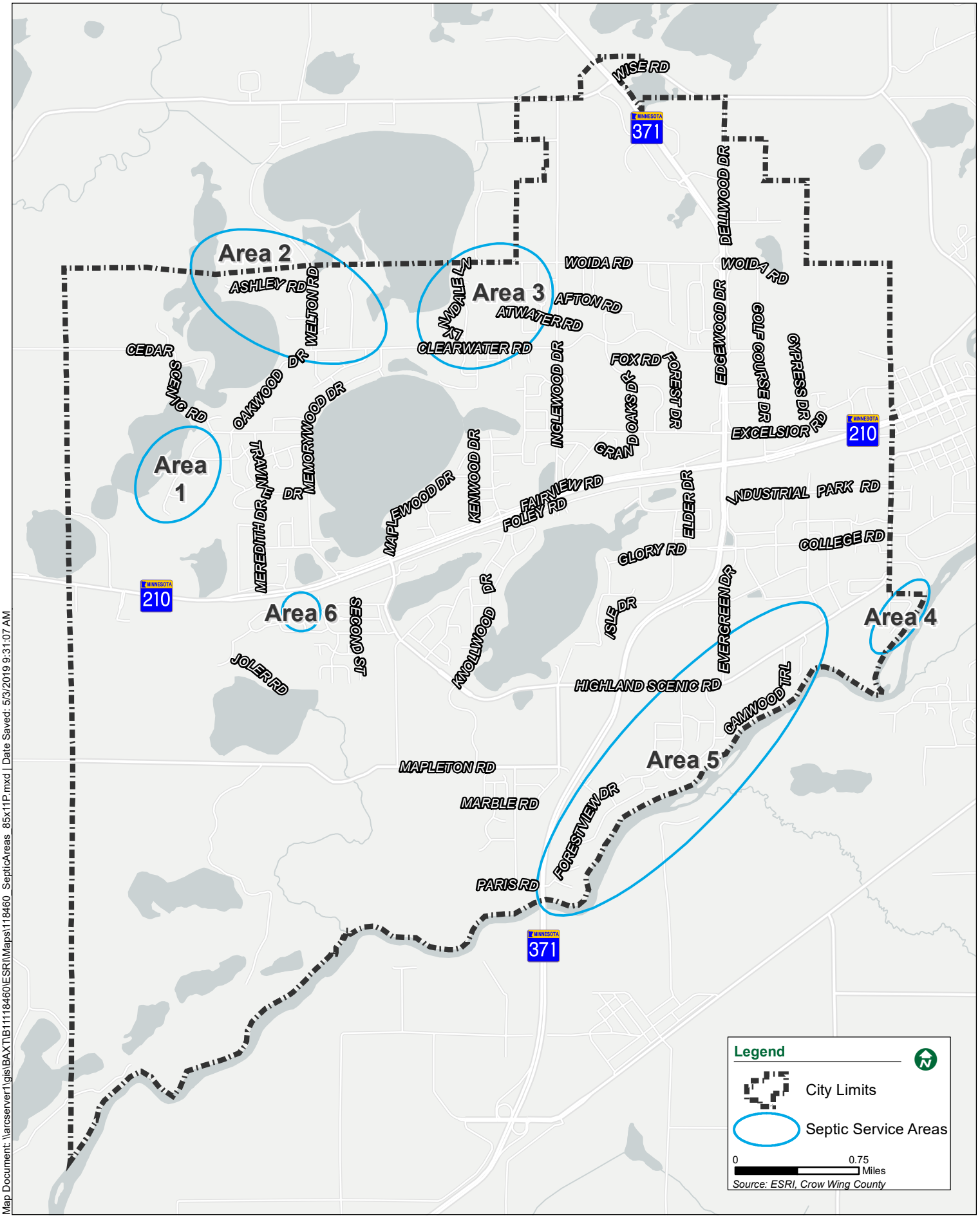

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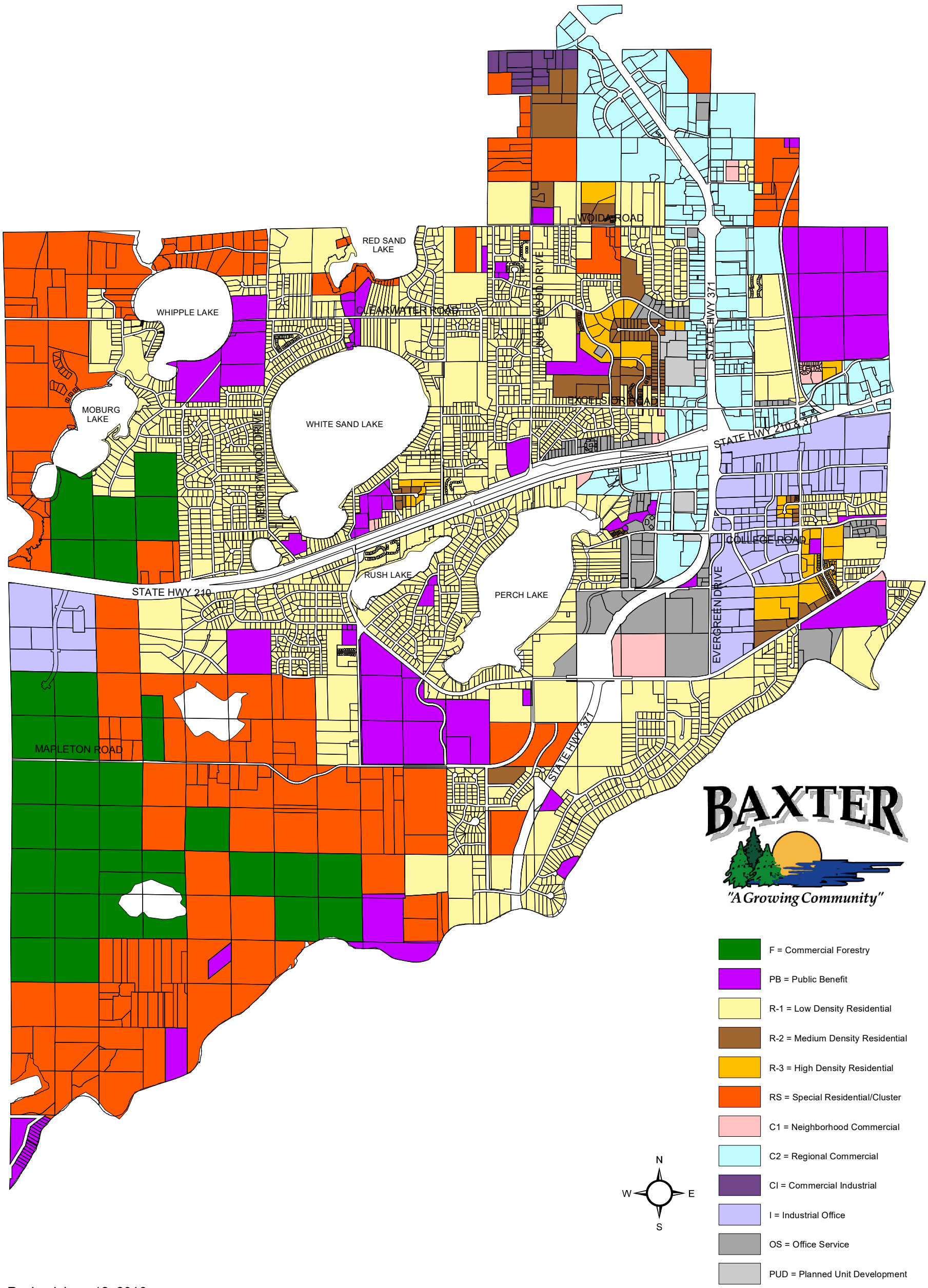
Appendix C: Baxter Zoning Map

Baxter Zoning Map



Revised June 12, 2018

Appendix D: Septic System Installation Dates

Septic System Inventory

City of Baxter, MN

Area 1

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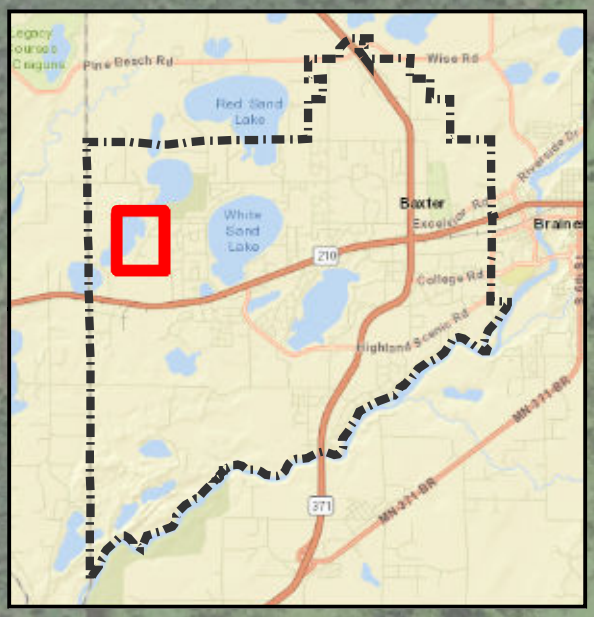

CEDAR SCENIC RD

BROWNSVILLE CIR

DEERWOOD RD

OLIVEWOOD DR

PINEWOOD RD

Legend

Septic System Installation Date

- 1975 - 1988
- 1989 - 1993
- 1994 - 1998
- 1999 - 2003
- 2004 - 2019

0 400 Feet

Source: ESRI, Crow Wing County

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Septic System Inventory

City of Baxter, MN

Area 2

May 2019

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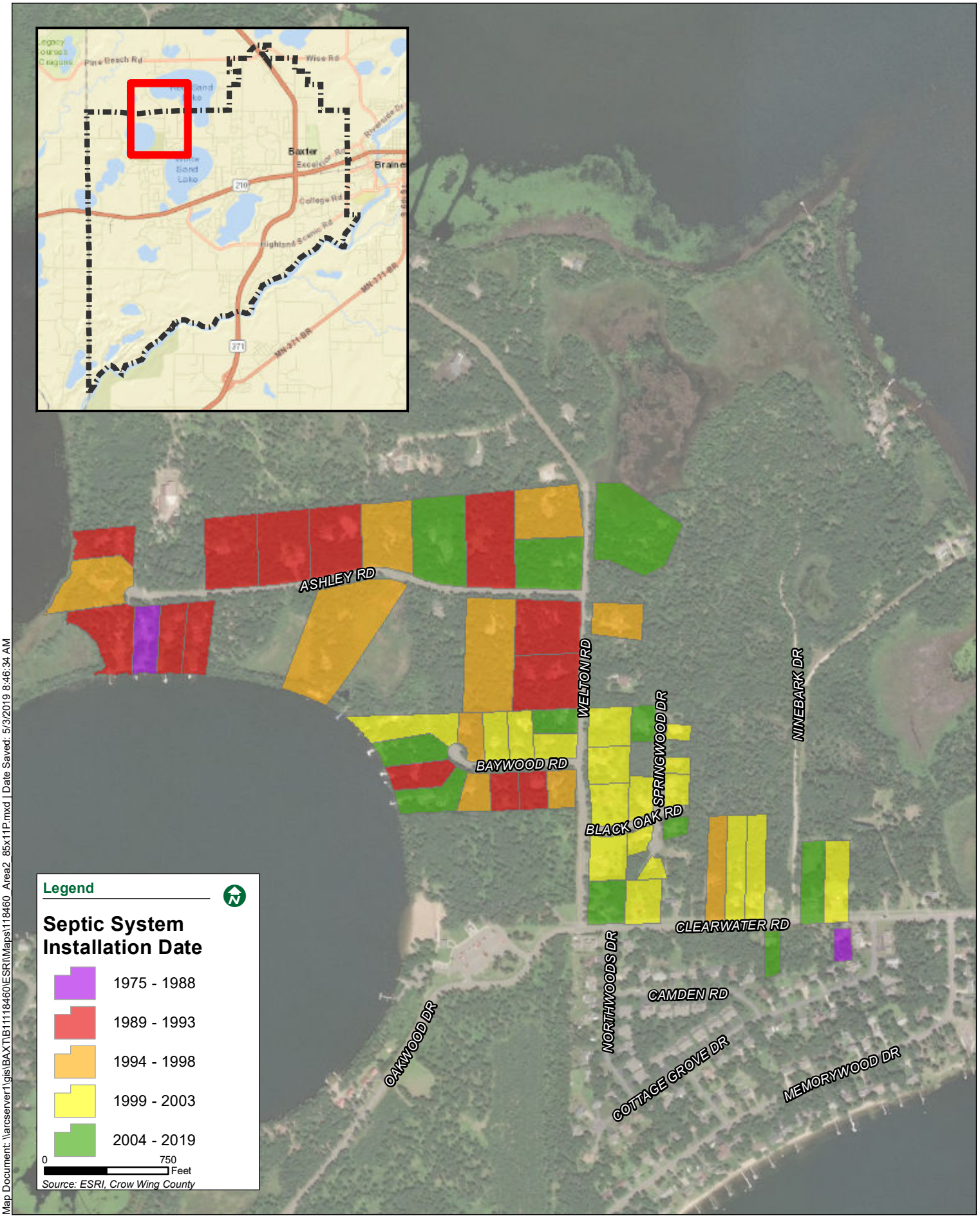

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Septic System Inventory

City of Baxter, MN

Area 3

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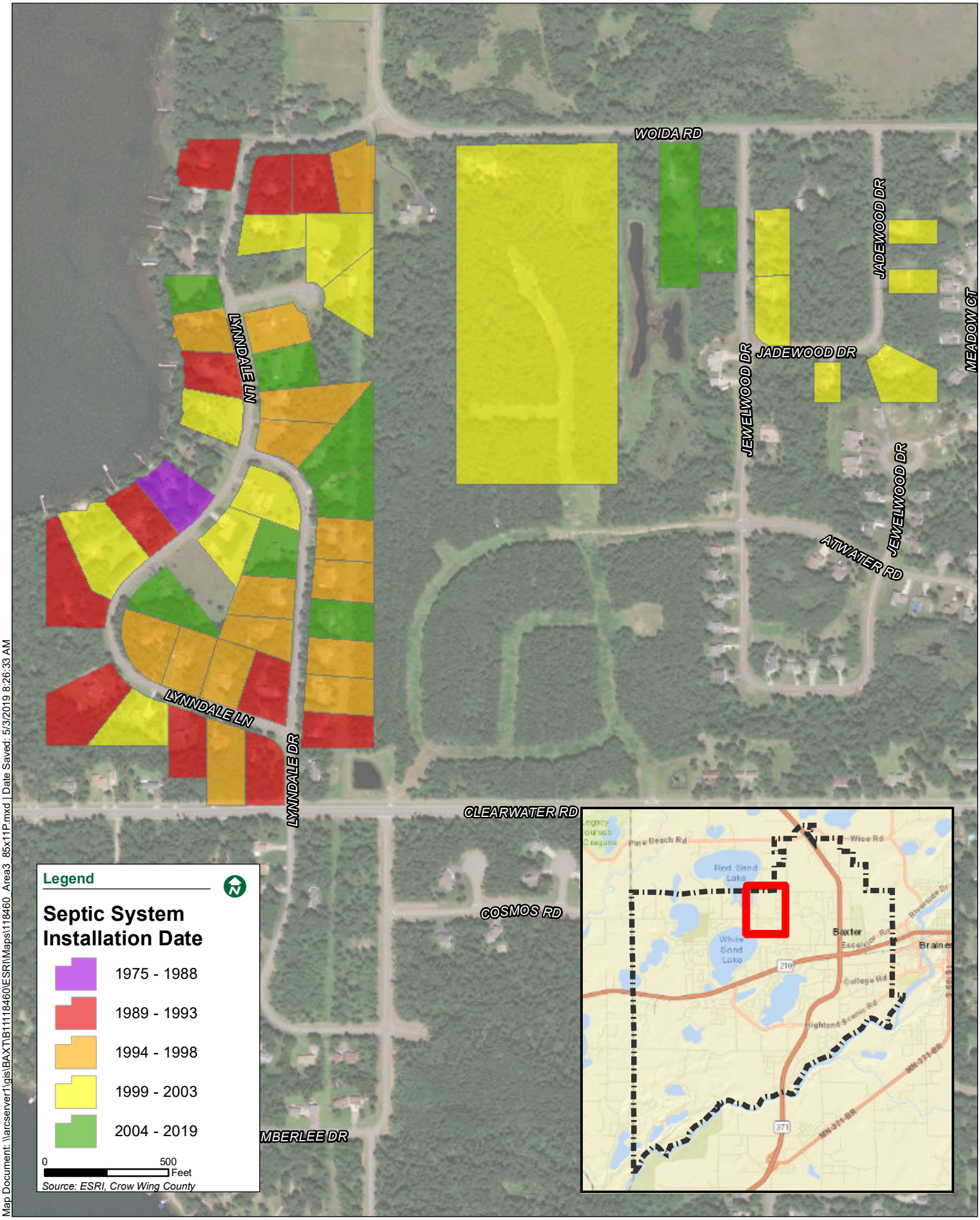

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Septic System Inventory

City of Baxter, MN

Area 4

May 2019

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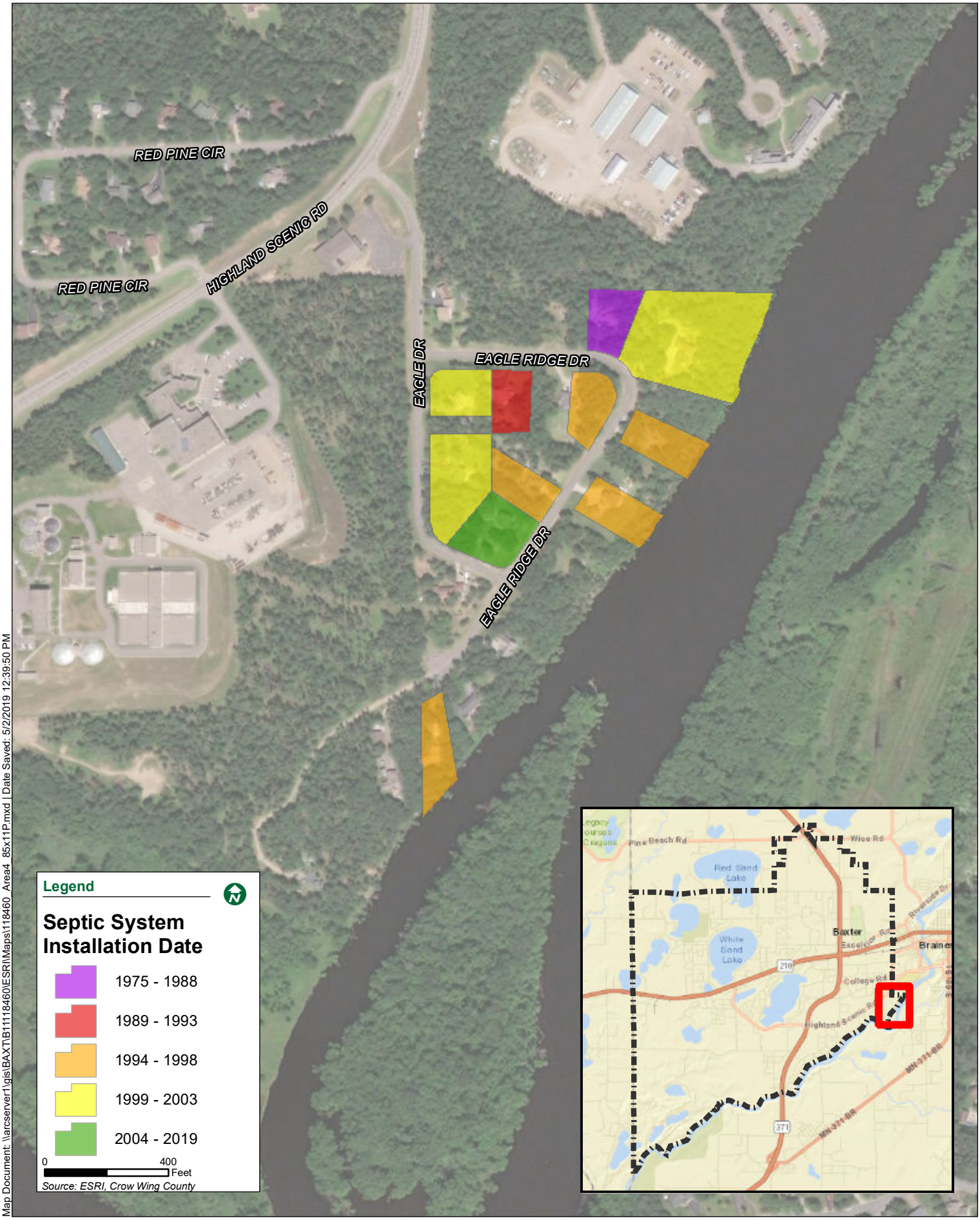

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Septic System Inventory

City of Baxter, MN

Area 5a

May 2019

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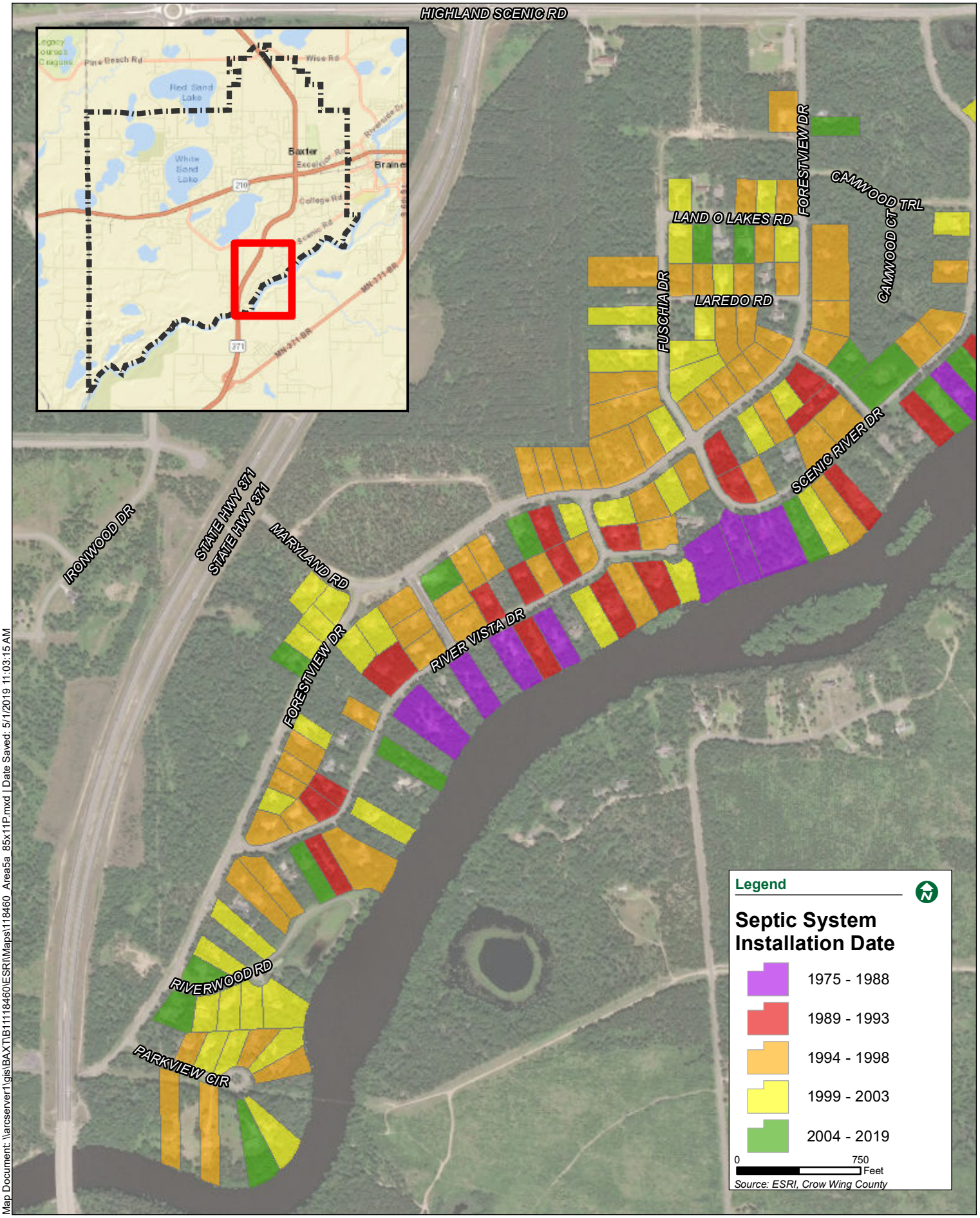

Septic System Inventory

City of Baxter, MN

Area 5b

May 2019

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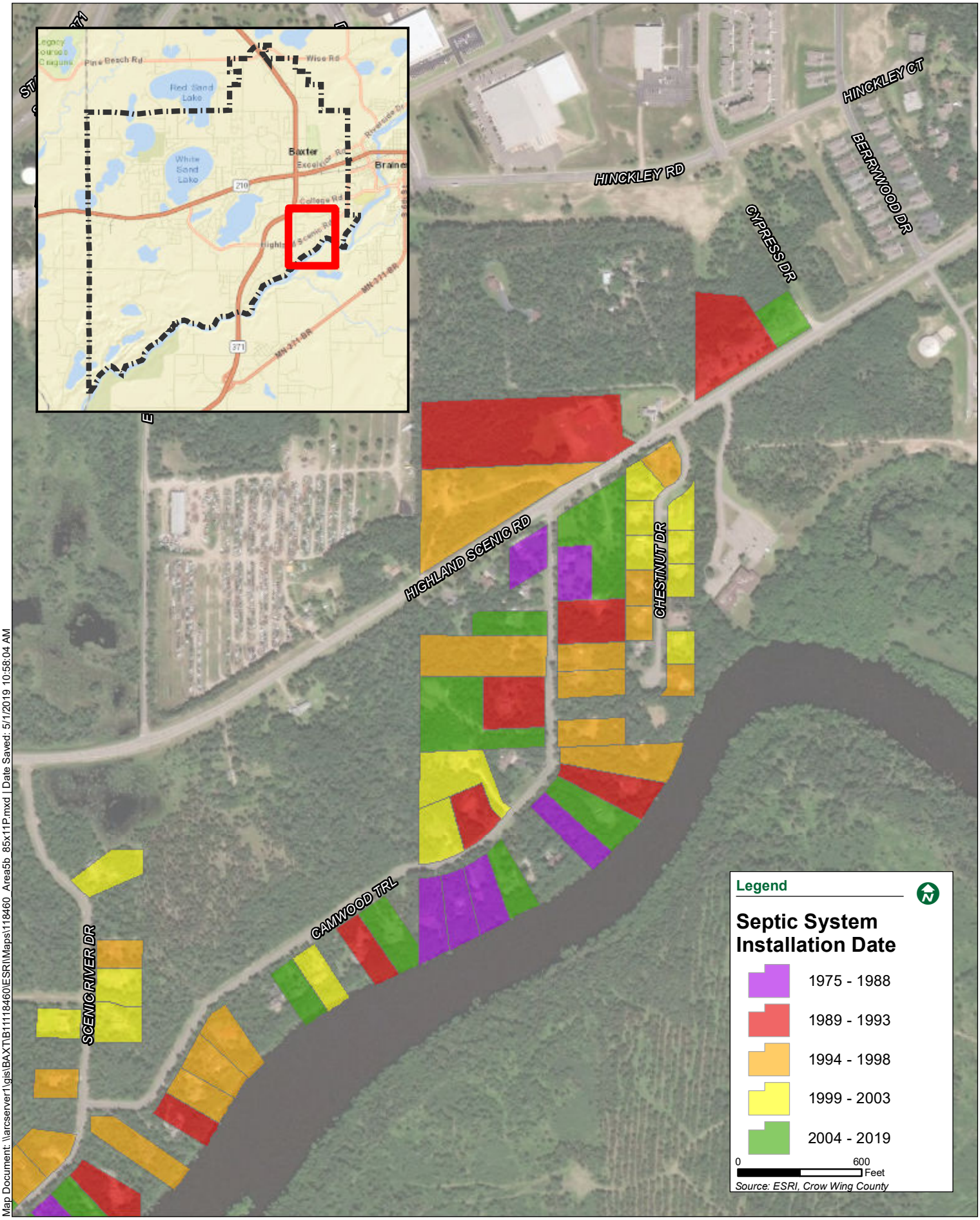

Septic System Inventory

City of Baxter, MN

Area 6

May 2019

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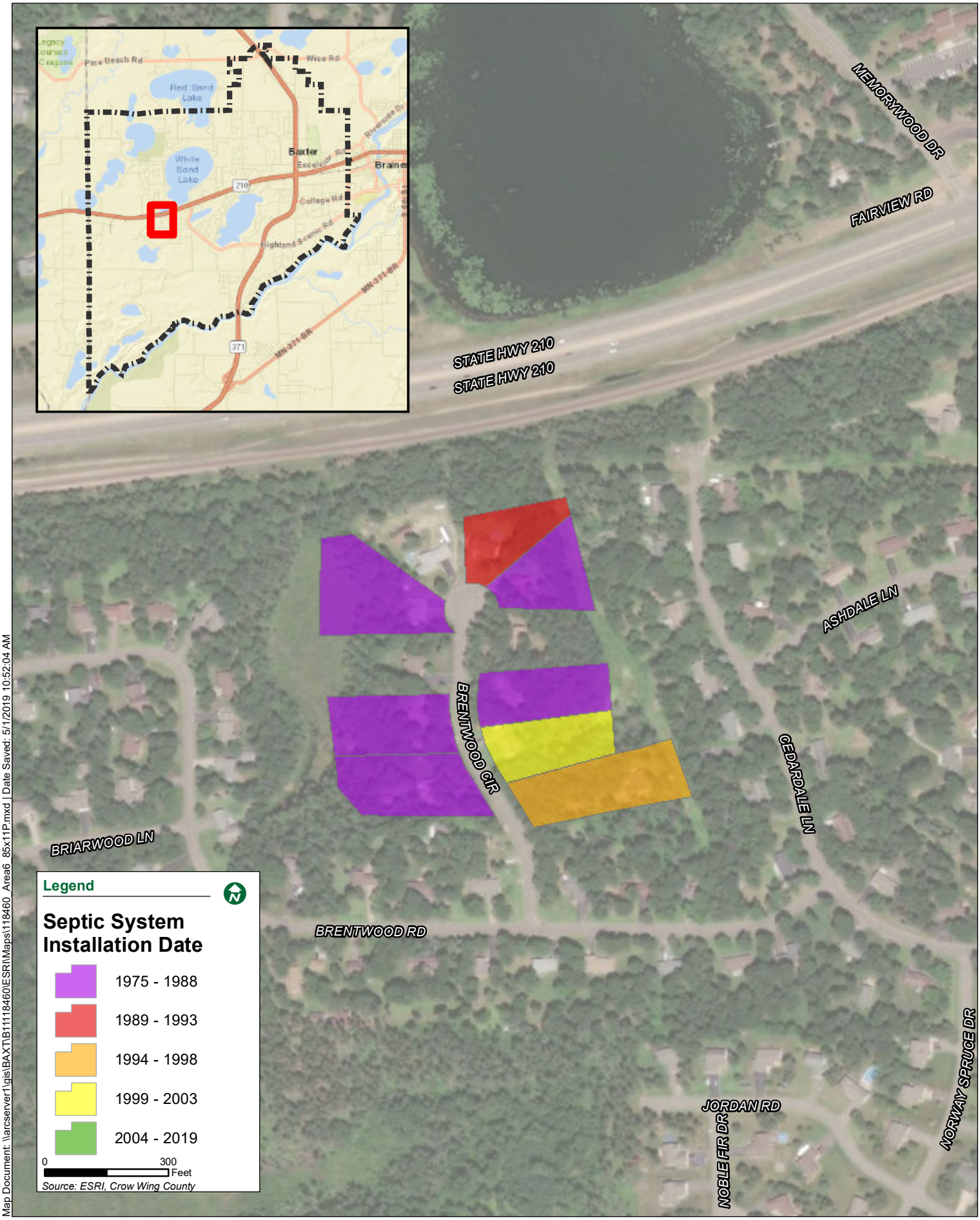

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2019 City of Baxter Septic System Inventory								
PROJECT AREA	ADDRNUM	FULLNAME	FILE STATUS	YEAR INSTALLED	YEAR SYSTEM REPLACED	LATEST COMPLIANCE INSPECTION	SEPTIC TANK SIZE	WELL DEPTH (FT)
Area 1	4300	Deerwood Rd	No Records					
Area 1	4362	Deerwood Rd	No Records					
Area 1	13509	Olivewood Dr	Complete	1993		2011	1250	50
Area 1	13510	Olivewood Dr	Complete	1988		2012	1250	46
Area 1	13543	Olivewood Dr	Complete	1996			1250	
Area 1	13565	Olivewood Dr	Incomplete					30
Area 1	13582	Olivewood Dr	Complete	1986		2005		
Area 1	13603	Olivewood Dr	Complete	1999		2012	1600	43
Area 1	13631	Olivewood Dr	Complete	2000			1350	53
Area 1	13666	Olivewood Dr	Incomplete					
Area 1	13667	Olivewood Dr	Complete	1995				96
Area 1	13693	Olivewood Dr	Complete	2014			2250	
Area 1	13713	Olivewood Dr	Incomplete	1985			1250	
Area 1	13723	Olivewood Dr	Complete	1988		2003	1250	
Area 1	13726	Olivewood Dr	Complete	1986		2017	1250	47
Area 1	13771	Olivewood Dr	Complete	1985	2001	2001	1250	
Area 1	13792	Olivewood Dr	Complete	1994		2005		
Area 1	13855	Olivewood Dr	Complete			2007	1200	
Area 1	13875	Olivewood Dr	Complete	1995		2004	1200	49
Area 1	13905	Olivewood Dr	Complete	1998		2005	1350	
Area 1	13915	Olivewood Dr	Complete	1981		2007	1250	51

PROJECT AREA	ADDRNUM	FULLNAME	FILE STATUS	YEAR INSTALLED	YEAR SYSTEM REPLACED	LATEST COMPLIANCE INSPECTION	SEPTIC TANK SIZE	WELL DEPTH (FT)
Area 2	4470	Ashley Rd	Complete	1994		2017	1350	29
Area 2	4475	Ashley Rd	Complete	1989		2007	1350	
Area 2	4478	Ashley Rd	Incomplete	1992				32
Area 2	4501	Ashley Rd	Complete	1988		2008	1250	32
Area 2	4529	Ashley Rd	Complete	1991		2001	1250	
Area 2	4565	Ashley Rd	Incomplete	1989				
Area 2	4568	Ashley Rd	Complete	1990		2006	1500	
Area 2	4670	Ashley Rd	Complete	1989	2000	2000	1250	
Area 2	4689	Ashley Rd	Incomplete	1998				
Area 2	4718	Ashley Rd	Incomplete	1992				
Area 2	4758	Ashley Rd	Complete	1994			1250	52
Area 2	4837	Ashley Rd	Complete			2007		50
Area 2	4842	Ashley Rd	Complete		2007	2018		
Area 2	4895	Ashley Rd	Complete	1996		2016	1250	62
Area 2	4904	Ashley Rd	Complete	1991	2010	2010	2850	57
Area 2	4929	Ashley Rd	Complete	1993		2003	1350	
Area 2	4972	Ashley Rd	Complete	2018		2018	3000	
Area 2	4845	Baywood Rd	Complete	2018		2018	2250	55
Area 2	4852	Baywood Rd	Complete	2001			1500	
Area 2	4854	Baywood Rd	Complete	1995		2017	1250	86
Area 2	4859	Baywood Rd	Complete	1993		2006	1250	50
Area 2	4873	Baywood Rd	Complete	1994	2014		2250	
Area 2	4889	Baywood Rd	Complete	1995		2018	1350	46
Area 2	4905	Baywood Rd	Complete	1993		2005	1250	49
Area 2	4908	Baywood Rd	Complete	1994	2000	2008	1250	51
Area 2	4940	Baywood Rd	Complete	1994	2000	2014	1250	53
Area 2	4953	Baywood Rd	Complete	1993		2017	1250	49
Area 2	4958	Baywood Rd	Complete	1994	2000	2007	1350	52
Area 2	4967	Baywood Rd	Complete	1994		2003	1250	
Area 2	5066	Clearwater Rd	Complete	1999		2013	1250	
Area 2	5116	Clearwater Rd	Complete			1998		50
Area 2	5148	Clearwater Rd	Complete		1997	2018	1250	
Area 2	5182	Clearwater Rd	Complete	1999		2017	1000	
Area 2	5200	Clearwater Rd	Complete	2002			1000	
Area 2	5225	Clearwater Rd	Complete	2015			2250	
Area 2	5242	Clearwater Rd	No Records					
Area 2	5274	Clearwater Rd	Complete	1989	2017	2017	3500	
Area 2	5292	Clearwater Rd	Complete	2001		2013	1500	
Area 2	5309	Clearwater Rd	Complete	1980		2004	1250	
Area 2	5356	Clearwater Rd	No Records					36
Area 2	5404	Clearwater Rd	Complete			2017	1350	
Area 2	14583	Springwood Ct	Complete	2001		2008	1250	
Area 2	14601	Springwood Ct	Complete	2001		2007	1350	
Area 2	14608	Springwood Ct	Complete	2004			1350	57
Area 2	14635	Springwood Dr	Complete	2001			1500	
Area 2	14648	Springwood Dr	Complete	2003		2018	1600	
Area 2	14686	Springwood Dr	Complete	2003		2017	1500	
Area 2	14724	Springwood Dr	Complete	2003			1500	
Area 2	14729	Springwood Dr	Complete	2014			2000	
Area 2	14522	Welton Rd	Complete	1994	2004	2016	1500	43
Area 2	14576	Welton Rd	Complete	1999		2015	1250	
Area 2	14642	Welton Rd	Complete	2000		2014	1250	
Area 2	14688	Welton Rd	Complete	2000		2013	1600	
Area 2	14739	Welton Rd	Complete	1994	2008		1850	
Area 2	14740	Welton Rd	Complete	1999			1350	
Area 2	14780	Welton Rd	Incomplete					54
Area 2	14785	Welton Rd	Complete	1991		2007	1250	55
Area 2	14842	Welton Rd	Complete	1996		2010	1350	
Area 2	14936	Welton Rd	Complete	1987	2018		2250	
Area 2	14989	Welton Rd	Incomplete	1995			1500	

PROJECT AREA	ADDRNUM	FULLNAME	FILE STATUS	YEAR INSTALLED	YEAR SYSTEM REPLACED	LATEST COMPLIANCE INSPECTION	SEPTIC TANK SIZE	WELL DEPTH (FT)
Area 3	14888	Jadewood Dr	Complete	2001			1600	
Area 3	14906	Jadewood Dr	Complete	2002			1600	
Area 3	14932	Jadewood Dr	Complete	2002		2014	1600	
Area 3	14954	Jadewood Dr	Complete	2002			1600	65
Area 3	14890	Jewelwood Dr	Complete	2003			1500	72
Area 3	14911	Jewelwood Dr	Complete	2004		2016	1600	
Area 3	14938	Jewelwood Dr	Complete	2000		2018	1350	
Area 3	5921	Lynndale Ct	Complete	1998		2014		83
Area 3	5954	Lynndale Ct	Incomplete	1999				
Area 3	5959	Lynndale Ct	Complete	2001		2013		
Area 3	14576	Lynndale Dr	Complete	1991		2006	1250	58
Area 3	14601	Lynndale Dr	Complete	1993		2008	1250	54
Area 3	14610	Lynndale Dr	Complete	1998		2004	1250	
Area 3	14617	Lynndale Ln	Incomplete	1993				54
Area 3	14626	Lynndale Dr	Complete	1996		2018	1200	57
Area 3	14635	Lynndale Dr	Complete	1997		2007	1600	
Area 3	14646	Lynndale Dr	Complete	1998	2017	2008	1750	
Area 3	14659	Lynndale Dr	Complete	1998		2018	1600	
Area 3	14668	Lynndale Dr	Complete	1996		2008		56
Area 3	14691	Lynndale Dr	Complete	1997	2016		1750	
Area 3	14704	Lynndale Dr	Complete	1996		2005		54
Area 3	14724	Lynndale Dr	Complete	1995	2011		3100	51
Area 3	14736	Lynndale Dr	Complete	1995	2014		3700	54
Area 3	14581	Lynndale Ln	Complete	1993		2004	1350	55
Area 3	14595	Lynndale Ln	Incomplete	1995			1250	54
Area 3	14596	Lynndale Ln	Complete	1997		2012	1500	53
Area 3	14626	Lynndale Ln	Complete	1998		2007	1250	
Area 3	14631	Lynndale Ln	Complete	1995	2002		3000	55
Area 3	14634	Lynndale Ln	Complete	1995		2009	1500	56
Area 3	14645	Lynndale Ln	Complete	1992		2010	1250	56
Area 3	14675	Lynndale Ln	Complete	1991		2013	1250	
Area 3	14689	Lynndale Ln	Complete	2001		2008	1250	
Area 3	14714	Lynndale Ln	Complete	2005		2005	1350	52
Area 3	14727	Lynndale Ln	Incomplete	1992			1500	53
Area 3	14741	Lynndale Ln	Complete	1986		2007		71
Area 3	14752	Lynndale Ln	Complete	1999		2005	1350	52
Area 3	14774	Lynndale Ln	Complete	1999			1350	53
Area 3	14789	Lynndale Ln	No Records					64
Area 3	14797	Lynndale Ln	Complete	1999			1250	
Area 3	14804	Lynndale Ln	Complete	1997		2009	1350	53
Area 3	14816	Lynndale Ln	Incomplete	1998		2015	1350	51
Area 3	14828	Lynndale Ln	Complete	1998	2017		2950	50
Area 3	14835	Lynndale Ln	Complete	1993		2011	1350	
Area 3	14859	Lynndale Ln	Complete	1994		2004	1500	
Area 3	14877	Lynndale Ln	Complete		2016		2250	54
Area 3	14891	Lynndale Ln	Complete			2007	1200	
Area 3	14897	Lynndale Ln	Complete					
Area 3	14898	Lynndale Ln	Complete	1995	1999		1500	
Area 3	14924	Lynndale Ln	Complete	1990		2006	1550	
Area 3	14925	Lynndale Ln	Complete			2000	1200	
Area 3	14949	Lynndale Ln	Incomplete	1989			1900	52
Area 3	14984	Lynndale Ln	Complete	1990		2007		
Area 3	14998	Lynndale Ln	Complete	1997		2007	1350	
Area 3	15004	Lynndale Ln	Complete			2010	1200	
Area 3	6097	Woida Rd	Complete	2001			1500	
Area 3	6227	Woida Rd	Complete		2004		1500	
Area 3	6327	Woida Rd	Complete			2014	2500	80

PROJECT AREA	ADDRNUM	FULLNAME	FILE STATUS	YEAR INSTALLED	YEAR SYSTEM REPLACED	LATEST COMPLIANCE INSPECTION	SEPTIC TANK SIZE	WELL DEPTH (FT)
Area 4	12838	Eagle Dr	Complete	2014		2003	2250	
Area 4	12843	Eagle Dr	No Records					72
Area 4	12908	Eagle Dr	Complete	2001			1500	
Area 4	12934	Eagle Dr	Complete	2003		2011	1500	86
Area 4	12988	Eagle Dr	Complete			2004	1200	
Area 4	13021	Eagle Dr	Complete			2008		
Area 4	12747	Eagle Ridge Dr	No Records					
Area 4	12752	Eagle Ridge Dr	Complete			2009	1250	
Area 4	12768	Eagle Ridge Dr	Complete	1997			1500	
Area 4	12776	Eagle Ridge Dr	No Records					
Area 4	12786	Eagle Ridge Dr	No Records					
Area 4	12841	Eagle Ridge Dr	Complete	1995		2006	1200	
Area 4	12848	Eagle Ridge Dr	Complete	1994		2014	1500	72
Area 4	12874	Eagle Ridge Dr	Complete	1994			1250	82
Area 4	12886	Eagle Ridge Dr	Complete	2003			1250	
Area 4	12900	Eagle Ridge Dr	Complete	1985		2003	1250	
Area 4	12901	Eagle Ridge Dr	Complete	1997		2005	1250	74
Area 4	12923	Eagle Ridge Dr	Complete	1989		2007	1250	94

PROJECT AREA	ADDRNUM	FULLNAME	FILE STATUS	YEAR INSTALLED	YEAR SYSTEM REPLACED	LATEST COMPLIANCE INSPECTION	SEPTIC TANK SIZE	WELL DEPTH (FT)
Area 5	12176	Camwood Trl	Complete	1998		2018	2500	
Area 5	12222	Camwood Trl	Incomplete	1993			1350	43
Area 5	12230	Camwood Trl	Incomplete	1994			1250	
Area 5	12254	Camwood Trl	Complete	1997		2005	1600	
Area 5	12276	Camwood Trl	Incomplete	1996			1350	
Area 5	12324	Camwood Trl	Complete			2006		42
Area 5	12340	Camwood Trl	Complete	2011			1500	39
Area 5	12360	Camwood Trl	Complete	2000			1350	39
Area 5	12394	Camwood Trl	Complete	1992		2008	1250	
Area 5	12406	Camwood Trl	Complete	2013			2250	
Area 5	12452	Camwood Trl	Complete	1984		2007	1200	
Area 5	12464	Camwood Trl	Complete	1986		1998		
Area 5	12467	Camwood Trl	Complete	2001			1600	
Area 5	12470	Camwood Trl	Complete	1986		1999		29
Area 5	12493	Camwood Trl	Complete	1990		2002	1200	
Area 5	12494	Camwood Trl	Complete	1997	2006		1600	
Area 5	12506	Camwood Trl	Complete			2017	1350	
Area 5	12508	Camwood Trl	No Records					30
Area 5	12509	Camwood Trl	Complete	2003			1500	
Area 5	12526	Camwood Trl	Complete	1987		2006	1250	
Area 5	12536	Camwood Trl	Complete	2008			2250	41
Area 5	12545	Camwood Trl	Complete			2008	1200	
Area 5	12548	Camwood Trl	Incomplete	1990			1250	
Area 5	12556	Camwood Trl	Incomplete	1994				
Area 5	12562	Camwood Trl	Complete	1996		2005		
Area 5	12567	Camwood Trl	Complete	2016			2950	
Area 5	12595	Camwood Trl	Complete	1990		2017	1250	
Area 5	12604	Camwood Trl	Complete	1998		2003		32
Area 5	12610	Camwood Trl	Complete	1994		2008		
Area 5	12619	Camwood Trl	Complete	1998		2004	1200	
Area 5	12641	Camwood Trl	Complete		2013		2750	28
Area 5	12648	Camwood Trl	Complete	1989		2008	1250	
Area 5	12666	Camwood Trl	Complete	1975		2007	1000	
Area 5	12669	Camwood Trl	No Records					
Area 5	12671	Camwood Trl	No Records					50
Area 5	12707	Camwood Trl	Complete	1984		2014	1200	
Area 5	12556	Chestnut Dr	Complete	1996		2017	1350	
Area 5	12581	Chestnut Dr	Incomplete					
Area 5	12584	Chestnut Dr	Complete	1999			1350	
Area 5	12609	Chestnut Dr	Complete	1996		2015	1250	
Area 5	12627	Chestnut Dr	Complete	1997		2018	1250	
Area 5	12646	Chestnut Dr	Complete	2000		2008	1350	
Area 5	12658	Chestnut Dr	Complete	1999			1000	
Area 5	12665	Chestnut Dr	Complete	1999		2017	1000	
Area 5	12689	Chestnut Dr	Complete	1999		2017	1350	
Area 5	12690	Chestnut Dr	Complete		2002	2012	1350	37
Area 5	12705	Chestnut Dr	Complete	2000		2014	1350	
Area 5	12743	Chestnut Dr	Complete	1996		2013	1250	
Area 5	11356	Forestview Dr	Complete	2005		2007	1500	72
Area 5	11410	Forestview Dr	Complete	1999		2018	1350	
Area 5	11442	Forestview Dr	Complete	1999		2012	1350	
Area 5	11472	Forestview Dr	Complete	1995		2008	1250	
Area 5	11542	Forestview Dr	Complete	1999			1350	
Area 5	11558	Forestview Dr	Complete	1998			1350	
Area 5	11574	Forestview Dr	Complete	1998			1350	
Area 5	11592	Forestview Dr	Complete	1998		2016	1350	
Area 5	11600	Forestview Dr	Complete	1999			1350	
Area 5	11645	Forestview Dr	Complete	1998		2018	1350	
Area 5	11663	Forestview Dr	Complete	1999		2016	1350	
Area 5	11677	Forestview Dr	Complete	2003		2010	1350	
Area 5	11686	Forestview Dr	Complete	2002		2014	1350	
Area 5	11700	Forestview Dr	Complete	1999			1500	
Area 5	11740	Forestview Dr	Complete	1996		2001	1250	127
Area 5	11794	Forestview Dr	Incomplete	1997			1250	
Area 5	11816	Forestview Dr	Complete	1996			1000	
Area 5	11850	Forestview Dr	Complete	2004		2015	1350	105
Area 5	11871	Forestview Dr	Incomplete	1995			1250	99
Area 5	11874	Forestview Dr	Complete	1991		2008	1500	48

PROJECT AREA	ADDRNUM	FULLNAME	FILE STATUS	YEAR INSTALLED	YEAR SYSTEM REPLACED	LATEST COMPLIANCE INSPECTION	SEPTIC TANK SIZE	WELL DEPTH (FT)
Area 5	11879	Forestview Dr	Incomplete	1996				
Area 5	11907	Forestview Dr	Complete	1996		2017	1250	93
Area 5	11913	Forestview Dr	Complete	1996		2015	1350	
Area 5	11941	Forestview Dr	Complete	1997		2007	1350	
Area 5	11950	Forestview Dr	Incomplete	1995				82
Area 5	11969	Forestview Dr	Complete	1998		2004	1250	
Area 5	11974	Forestview Dr	Complete	1986	2001		1250	
Area 5	11985	Forestview Dr	Complete	1990	1999	2017	1350	
Area 5	12025	Forestview Dr	Complete	1995			1250	37
Area 5	12053	Forestview Dr	Complete	1994		2018	1250	
Area 5	12064	Forestview Dr	Complete	2003		2011	1350	70
Area 5	12069	Forestview Dr	Complete	1998		2004	1250	
Area 5	12082	Forestview Dr	Complete	1995		2003	1250	64
Area 5	12095	Forestview Dr	Complete	1995			1250	
Area 5	12104	Forestview Dr	Complete	2003		2003	1250	
Area 5	12115	Forestview Dr	Incomplete	1995			1250	55
Area 5	12155	Forestview Dr	Complete	1996			1350	
Area 5	12164	Forestview Dr	Complete	1995		2015	1250	
Area 5	12192	Forestview Dr	Complete	1998		2012	1300	
Area 5	12229	Forestview Dr	Complete	1997			1350	
Area 5	12254	Forestview Dr	Complete	1994		2011	1250	
Area 5	12267	Forestview Dr	Complete	2002		2017	1350	
Area 5	12392	Forestview Dr	Complete	2014			2750	
Area 5	12395	Forestview Dr	Incomplete	1994			1250	
Area 5	12485	Forestview Dr	No Records					
Area 5	12067	Fuschia Dr	Complete	1998		2009	1350	
Area 5	12073	Fuschia Dr	Complete	1998		2005	1350	
Area 5	12082	Fuschia Dr	Complete	1999		2006	1350	
Area 5	12103	Fuschia Dr	Complete	2001		2006	1000	36
Area 5	12110	Fuschia Dr	Complete	1999			1350	
Area 5	12115	Fuschia Dr	Complete			2009	1250	
Area 5	12167	Fuschia Dr	Complete	2001		2009	1600	
Area 5	12195	Fuschia Dr	Complete	1997			1350	
Area 5	7539	Highland Scenic Rd	Incomplete					
Area 5	7652	Highland Scenic Rd	Complete	1996			1500	41
Area 5	7749	Highland Scenic Rd	Complete	2018			1500	
Area 5	7756	Highland Scenic Rd	Complete	1992		2008	1250	68
Area 5	7784	Highland Scenic Rd	No Records					100
Area 5	7816	Highland Scenic Rd	Complete	1989		2017	3000	
Area 5	7819	Highland Scenic Rd	Complete			2006	3500	
Area 5	7830	Highland Scenic Rd	Complete	2012		2012	3000	
Area 5	7846	Highland Scenic Rd	Complete	2012		2012	3000	
Area 5	7858	Highland Scenic Rd	Complete	2013		2013	3000	
Area 5	7103	Land O Lakes Rd	Complete	1999			1350	
Area 5	7104	Land O Lakes Rd	Complete	2002			1500	
Area 5	7135	Land O Lakes Rd	Complete	2012			1500	
Area 5	7136	Land O Lakes Rd	No Records					
Area 5	7146	Land O Lakes Rd	Complete			2015	1350	
Area 5	7151	Land O Lakes Rd	Complete			2007		
Area 5	7185	Land O Lakes Rd	Complete	2008			2250	
Area 5	7190	Land O Lakes Rd	Complete	1997		2017	1250	
Area 5	7200	Land O Lakes Rd	Complete	2000			1250	
Area 5	7209	Land O Lakes Rd	Complete	1996			1350	
Area 5	7222	Land O Lakes Rd	Complete	1997		2008	1500	
Area 5	7104	Laredo Rd	Complete	1996			1250	81
Area 5	7127	Laredo Rd	Complete	1999		2007	1350	84
Area 5	7132	Laredo Rd	Complete	1996		2009	1250	
Area 5	7152	Laredo Rd	Complete	2000		2011	1350	
Area 5	7153	Laredo Rd	Complete	1998		2004	1350	
Area 5	7172	Laredo Rd	Complete	1997		2016	1350	
Area 5	7175	Laredo Rd	Complete	1998		2004	1350	
Area 5	7206	Laredo Rd	Complete			2008		
Area 5	7217	Laredo Rd	Complete			2017		
Area 5	6697	Maryland Rd	Complete	2002		2012	1500	
Area 5	6715	Maryland Rd	Complete	2003		2013	1500	
Area 5	6800	Medford Rd	Complete	2013			2500	100
Area 5	6819	Medford Rd	Complete	1997		2015	1250	
Area 5	6820	Medford Rd	Complete	1995			1250	
Area 5	7263	Mississippi Rd	Complete	1991		2012	1250	
Area 5	7272	Mississippi Rd	Complete	1996	2015		1500	
Area 5	7283	Mississippi Rd	Complete	1991		2005	1250	
Area 5	7309	Mississippi Rd	Complete	1998			2250	69
Area 5	6501	Parkview Cir	Complete	1994		2001	1350	

PROJECT AREA	ADDRNUM	FULLNAME	FILE STATUS	YEAR INSTALLED	YEAR SYSTEM REPLACED	LATEST COMPLIANCE INSPECTION	SEPTIC TANK SIZE	WELL DEPTH (FT)
Area 5	6518	Parkview Cir	Complete	1997			2000	94
Area 5	6550	Parkview Cir	Complete	1999		2017	1500	
Area 5	6563	Parkview Cir	Complete	1997		2015	1250	
Area 5	6570	Parkview Cir	Complete	2000		2016	1500	
Area 5	6584	Parkview Cir	Complete	1998			1000	
Area 5	6589	Parkview Cir	Complete	2004		2018	1500	
Area 5	6590	Parkview Cir	Complete	2000			1350	
Area 5	6593	Parkview Cir	Complete	2001		2016	1000	
Area 5	6594	Parkview Cir	Incomplete	1998				
Area 5	7036	River Vista Ct	Complete	1992		2000	1250	
Area 5	7041	River Vista Ct	Complete	1994		2015	1600	
Area 5	7080	River Vista Ct	Incomplete	1995			1500	
Area 5	7081	River Vista Ct	Incomplete	1992			1250	93
Area 5	7093	River Vista Ct	Complete	1999		2006	1600	
Area 5	7098	River Vista Ct	Complete	1987		2007	1200	
Area 5	11556	River Vista Dr	Complete	1995		2002	1200	
Area 5	11568	River Vista Dr	Complete			1999	1250	
Area 5	11573	River Vista Dr	Complete	1998			1000	
Area 5	11586	River Vista Dr	Complete	1992	2011		2250	
Area 5	11594	River Vista Dr	Complete	1993		2017	1250	
Area 5	11595	River Vista Dr	Complete	1994		2018	1000	
Area 5	11607	River Vista Dr	Complete	1993		2016	1250	
Area 5	11614	River Vista Dr	Incomplete	1995				
Area 5	11632	River Vista Dr	Complete	2000			1250	70
Area 5	11635	River Vista Dr	Complete	1993		2018	1250	
Area 5	11647	River Vista Dr	Complete			2010		
Area 5	11656	River Vista Dr	Complete	1990	2008		2250	
Area 5	11679	River Vista Dr	Complete			2004	1250	102
Area 5	11689	River Vista Dr	Complete	1995			1250	
Area 5	11716	River Vista Dr	Complete	1988		2016	1250	
Area 5	11721	River Vista Dr	Complete	1993		2012		110
Area 5	11742	River Vista Dr	Complete			2004	1250	
Area 5	11749	River Vista Dr	Complete	1996		2010	1250	86
Area 5	11766	River Vista Dr	Complete	1986		2006		
Area 5	11783	River Vista Dr	Complete	1997			1250	
Area 5	11806	River Vista Dr	Complete	1988		2006	1250	
Area 5	11809	River Vista Dr	Incomplete	1992				
Area 5	11824	River Vista Dr	Complete	1993		2016	1200	
Area 5	11831	River Vista Dr	Complete	1990		2008	1250	
Area 5	11838	River Vista Dr	Complete	1987		2004	1250	
Area 5	11847	River Vista Dr	Complete	1994		2018	1250	
Area 5	11850	River Vista Dr	Complete			2018	1250	
Area 5	11865	River Vista Dr	Complete	1991		2017	1250	
Area 5	11868	River Vista Dr	Complete	1989	1999		1350	
Area 5	11884	River Vista Dr	Complete	1991		2010	1500	
Area 5	11895	River Vista Dr	Complete	1994		2002	1200	
Area 5	11924	River Vista Dr	Complete	2000		2013	1000	67
Area 5	11931	River Vista Dr	Complete	1999		2009	1250	
Area 5	6545	Riverwood Rd	Complete	2003		2016	1500	102
Area 5	6548	Riverwood Rd	Complete	2008		2018	2250	
Area 5	6587	Riverwood Rd	Complete	2003		2015	1500	
Area 5	6593	Riverwood Rd	Complete	2002			1500	87
Area 5	6613	Riverwood Rd	Complete	2003			1500	
Area 5	6621	Riverwood Rd	No Records					
Area 5	11931	Scenic River Dr	Complete	1991		2008	1250	
Area 5	11936	Scenic River Dr	Complete	1995		2004	1250	83
Area 5	11947	Scenic River Dr	Complete	1991		2018	1250	
Area 5	11948	Scenic River Dr	Complete			2005		
Area 5	11954	Scenic River Dr	Complete	1986		2004		
Area 5	11960	Scenic River Dr	Complete	1986		2010	1200	
Area 5	11965	Scenic River Dr	Complete	1994		2008	1250	
Area 5	11972	Scenic River Dr	Complete	2010			3700	
Area 5	11978	Scenic River Dr	Complete	1985	2003			
Area 5	11981	Scenic River Dr	Complete			2004		
Area 5	11982	Scenic River Dr	Complete	1994			1750	
Area 5	11988	Scenic River Dr	Complete	1991		2005	1250	62
Area 5	11989	Scenic River Dr	Complete	1995		2013	1350	65
Area 5	12068	Scenic River Dr	Complete	1989		2014	2500	
Area 5	12083	Scenic River Dr	Complete	2006			1250	
Area 5	12096	Scenic River Dr	Complete	2011			1500	
Area 5	12112	Scenic River Dr	Complete	1986		2002		
Area 5	12123	Scenic River Dr	Complete	1994		2014	1250	
Area 5	12148	Scenic River Dr	Complete	2004				

PROJECT AREA	ADDRNUM	FULLNAME	FILE STATUS	YEAR INSTALLED	YEAR SYSTEM REPLACED	LATEST COMPLIANCE INSPECTION	SEPTIC TANK SIZE	WELL DEPTH (FT)
Area 5	12153	Scenic River Dr	Complete	1995			1350	
Area 5	12160	Scenic River Dr	Incomplete	1989				
Area 5	12229	Scenic River Dr	Complete	1995		2011	1250	
Area 5	12269	Scenic River Dr	Complete	2001		2014	1500	
Area 5	12278	Scenic River Dr	Complete	1999		2016	1350	
Area 5	12310	Scenic River Dr	Complete	2002		2010	1250	
Area 5	12336	Scenic River Dr	Complete	1997		2008	1250	
Area 5	12382	Scenic River Dr	Complete	2001			1250	

PROJECT AREA	ADDRNUM	FULLNAME	FILE STATUS	YEAR INSTALLED	YEAR SYSTEM REPLACED	LATEST COMPLIANCE INSPECTION	SEPTIC TANK SIZE	WELL DEPTH (FT)
Area 6	12834	Brentwood Cir	Complete	1994		2016	1500	
Area 6	12857	Brentwood Cir	Complete	1987		2014	1350	
Area 6	12874	Brentwood Cir	Incomplete	2000		2012	1500	
Area 6	12895	Brentwood Cir	Complete	1987		2008	1250	
Area 6	12904	Brentwood Cir	Complete	1988		2005	1250	
Area 6	12905	Brentwood Cir	Complete			2018	1250	
Area 6	12918	Brentwood Cir	Complete			2017	1200	
Area 6	12937	Brentwood Cir	Complete	1987		2016	1250	
Area 6	12946	Brentwood Cir	Complete	1987		2002	1250	
Area 6	12947	Brentwood Cir	No Records					
Area 6	12949	Brentwood Cir	Complete	1990		2008	1200	

Appendix E: Area Base Maps

2019 SEPTIC SYSTEM INVENTORY

CITY OF BAXTER

AREA 1 BASEMAP

MAY 2019

BOLTON & MENK

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2019 SEPTIC SYSTEM INVENTORY

CITY OF BAXTER

AREA 1 BASEMAP

MAY 2019

BOLTON & MENK

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2019 SEPTIC SYSTEM INVENTORY

CITY OF BAXTER

AREA 2 BASEMAP

MAY 2019

BOLTON & MENK

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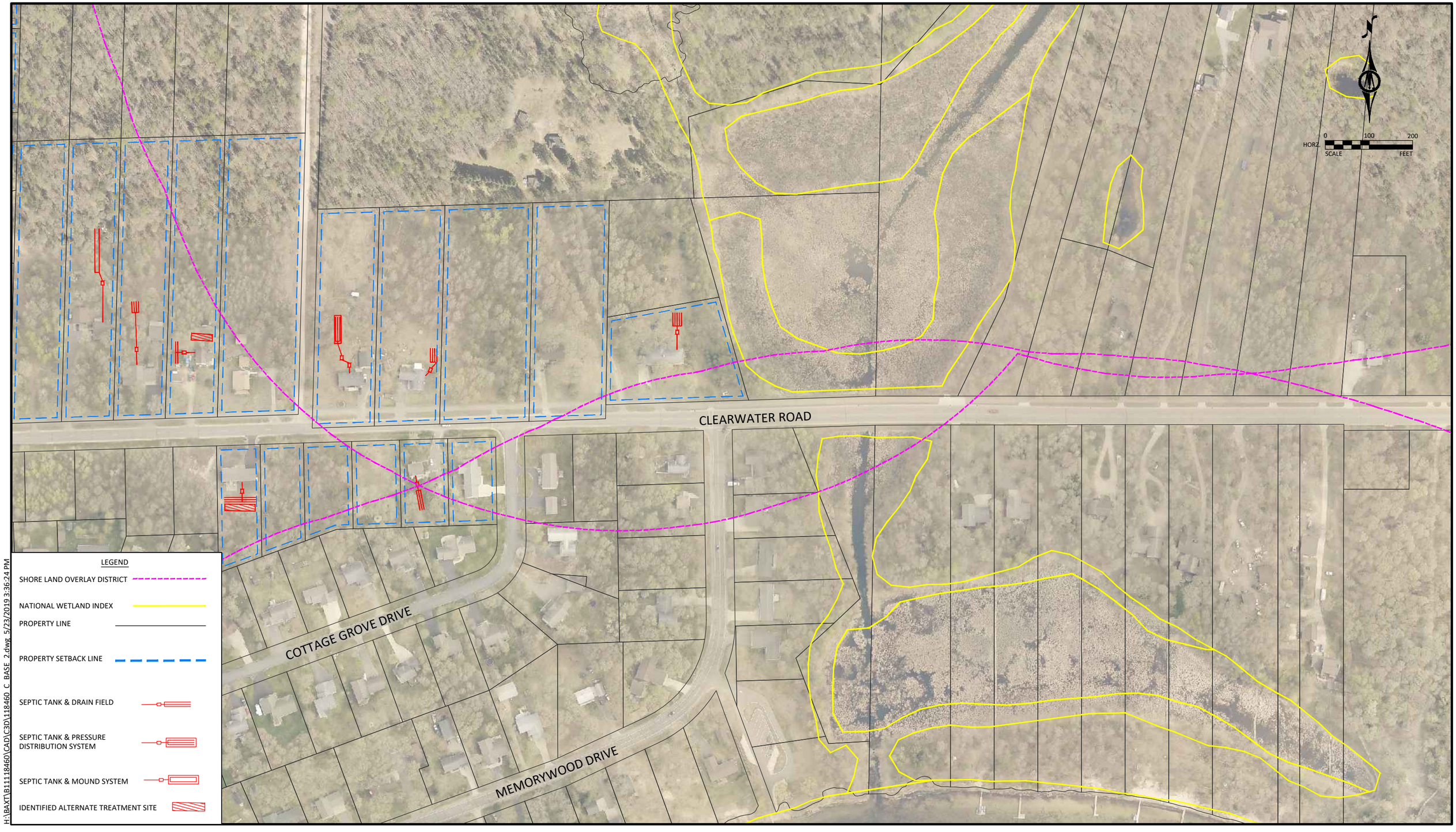
2019 SEPTIC SYSTEM INVENTORY

CITY OF BAXTER

AREA 2 BASEMAP

MAY 2019

BOLTON & MENK



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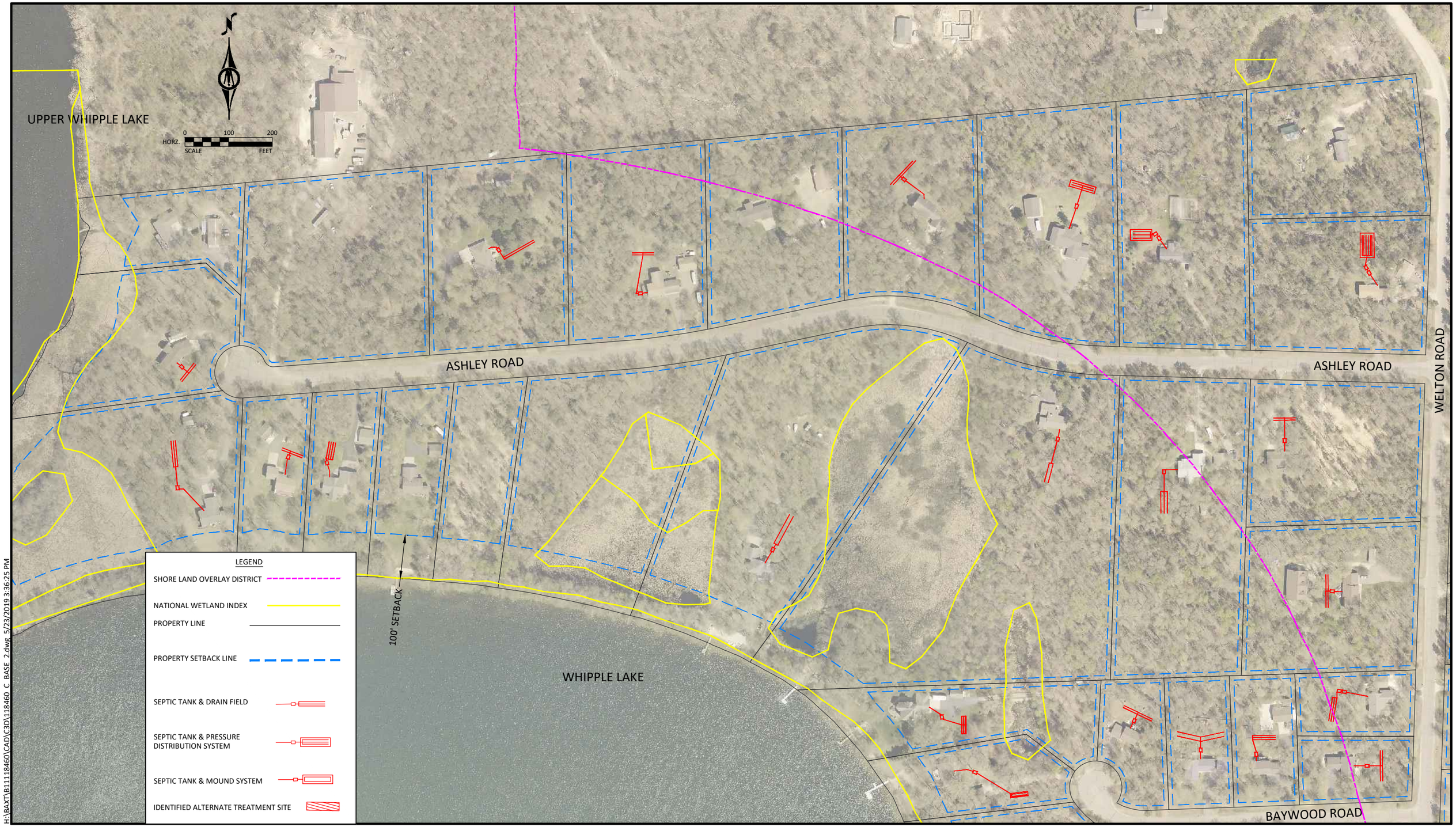
2019 SEPTIC SYSTEM INVENTORY

CITY OF BAXTER

AREA 2 BASEMAP

MAY 2019

BOLTON & MENK



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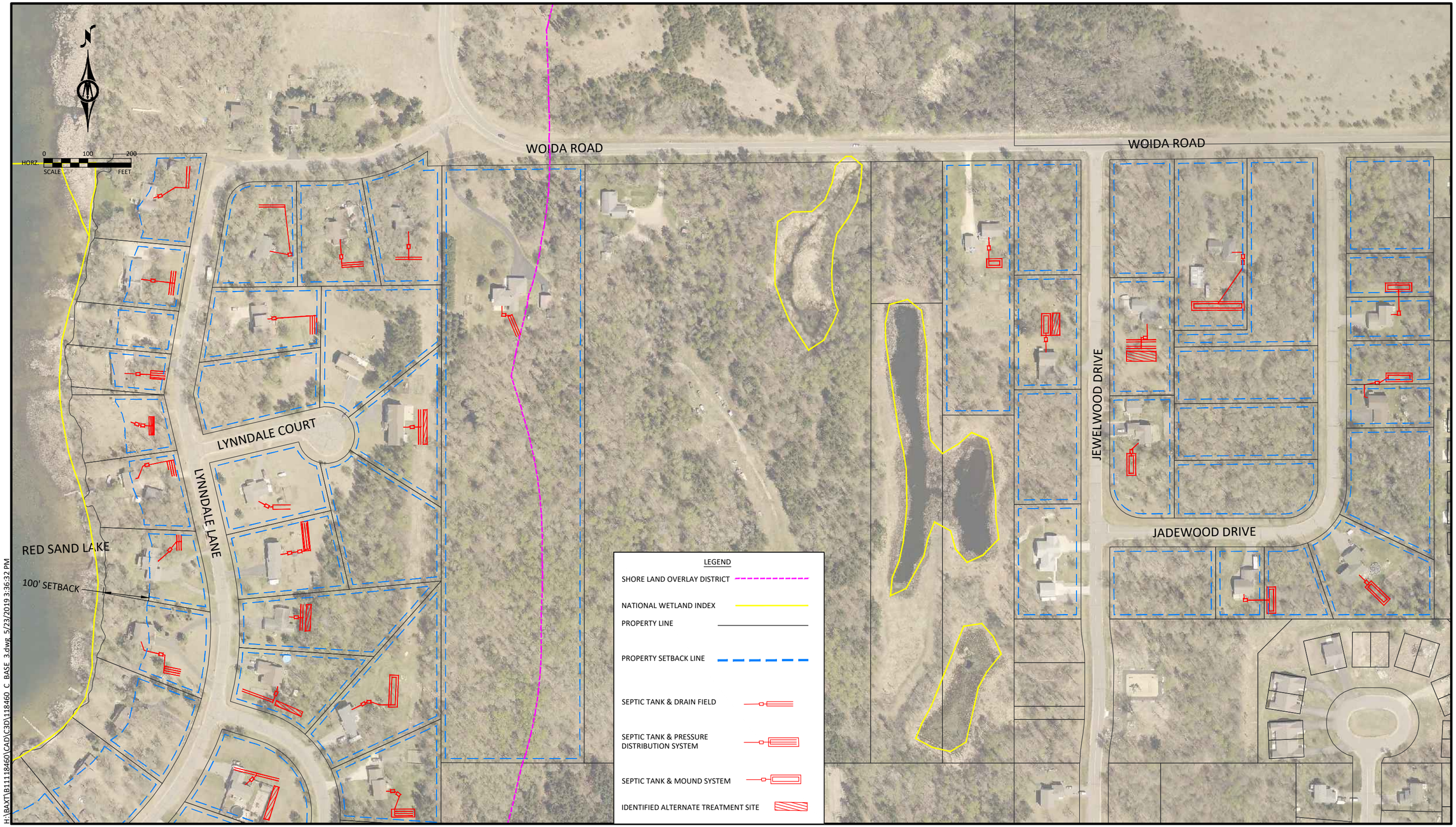
2019 SEPTIC SYSTEM INVENTORY

CITY OF BAXTER

AREA 3 BASEMAP

MAY 2019

BOLTON & MENK



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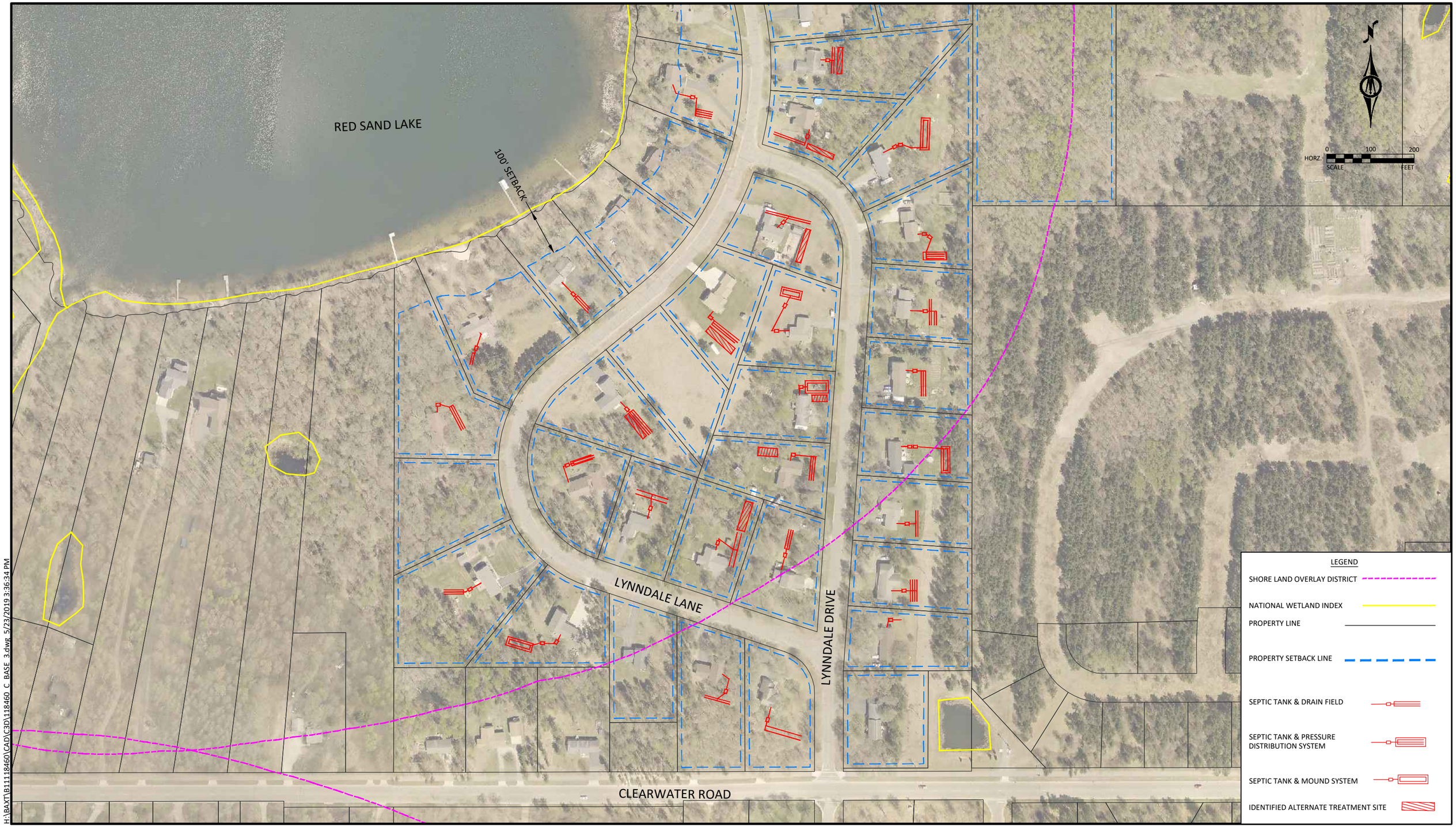
2019 SEPTIC SYSTEM INVENTORY

CITY OF BAXTER

AREA 3 BASEMAP

MAY 2019

BOLTON & MENK



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2019 SEPTIC SYSTEM INVENTORY

CITY OF BAXTER

AREA 4 BASEMAP

MAY 2019

BOLTON & MENK

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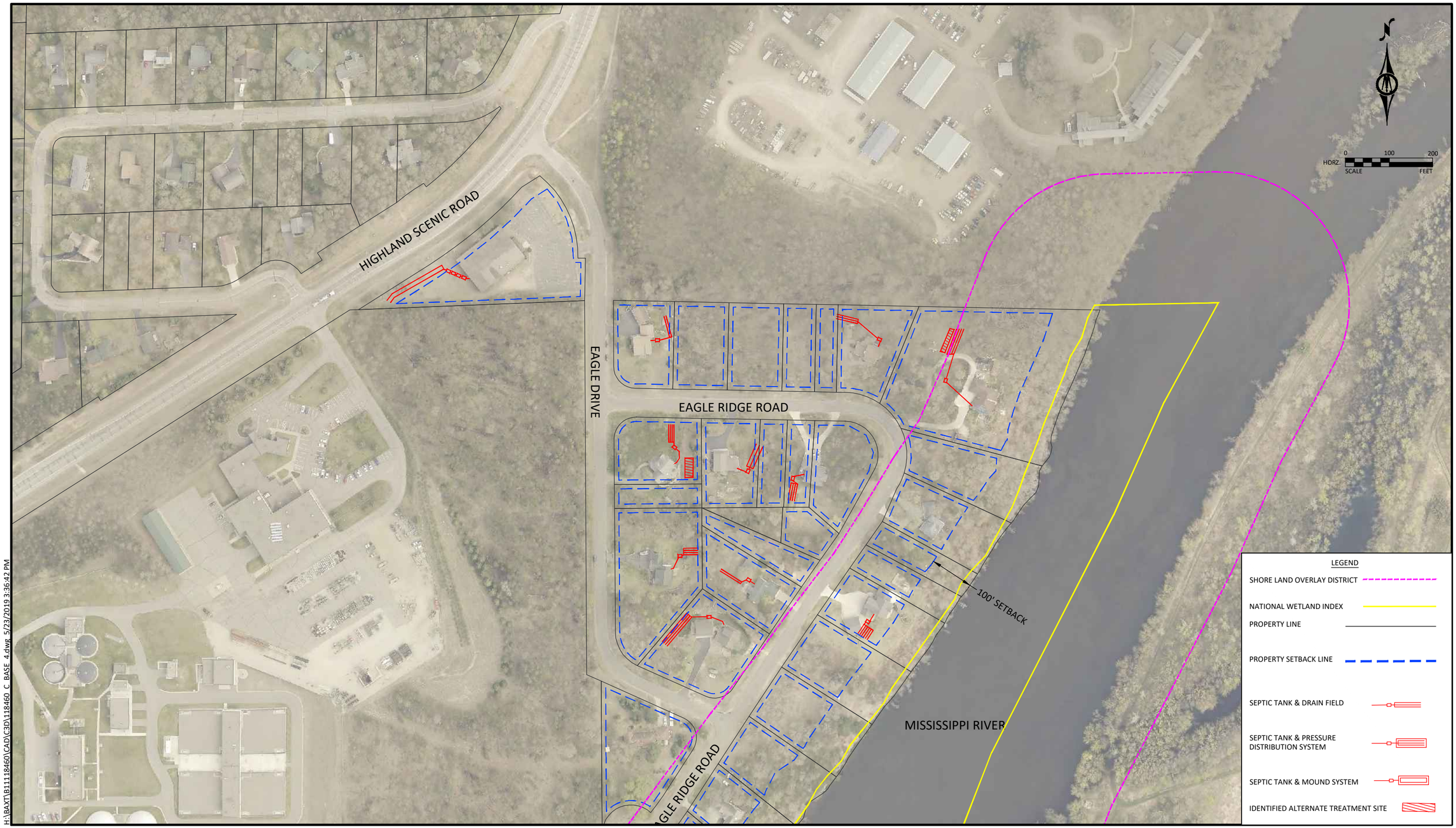
2019 SEPTIC SYSTEM INVENTORY

CITY OF BAXTER

AREA 4 BASEMAP

MAY 2019

BOLTON & MENK



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2019 SEPTIC SYSTEM INVENTORY

CITY OF BAXTER

AREA 5 BASEMAP

MAY 2019

BOLTON & MENK

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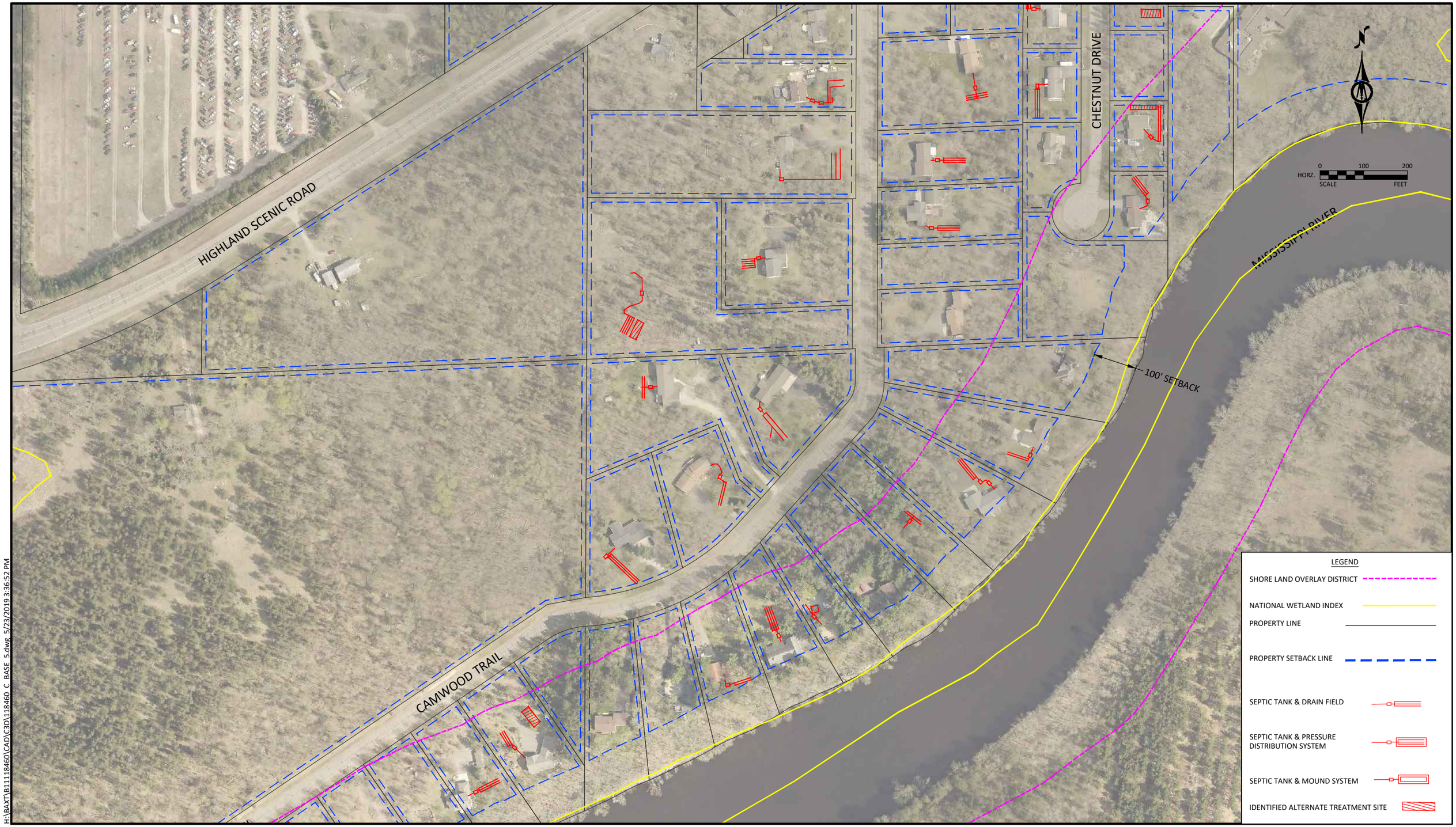
2019 SEPTIC SYSTEM INVENTORY

CITY OF BAXTER

AREA 5 BASEMAP

MAY 2019

BOLTON & MENK



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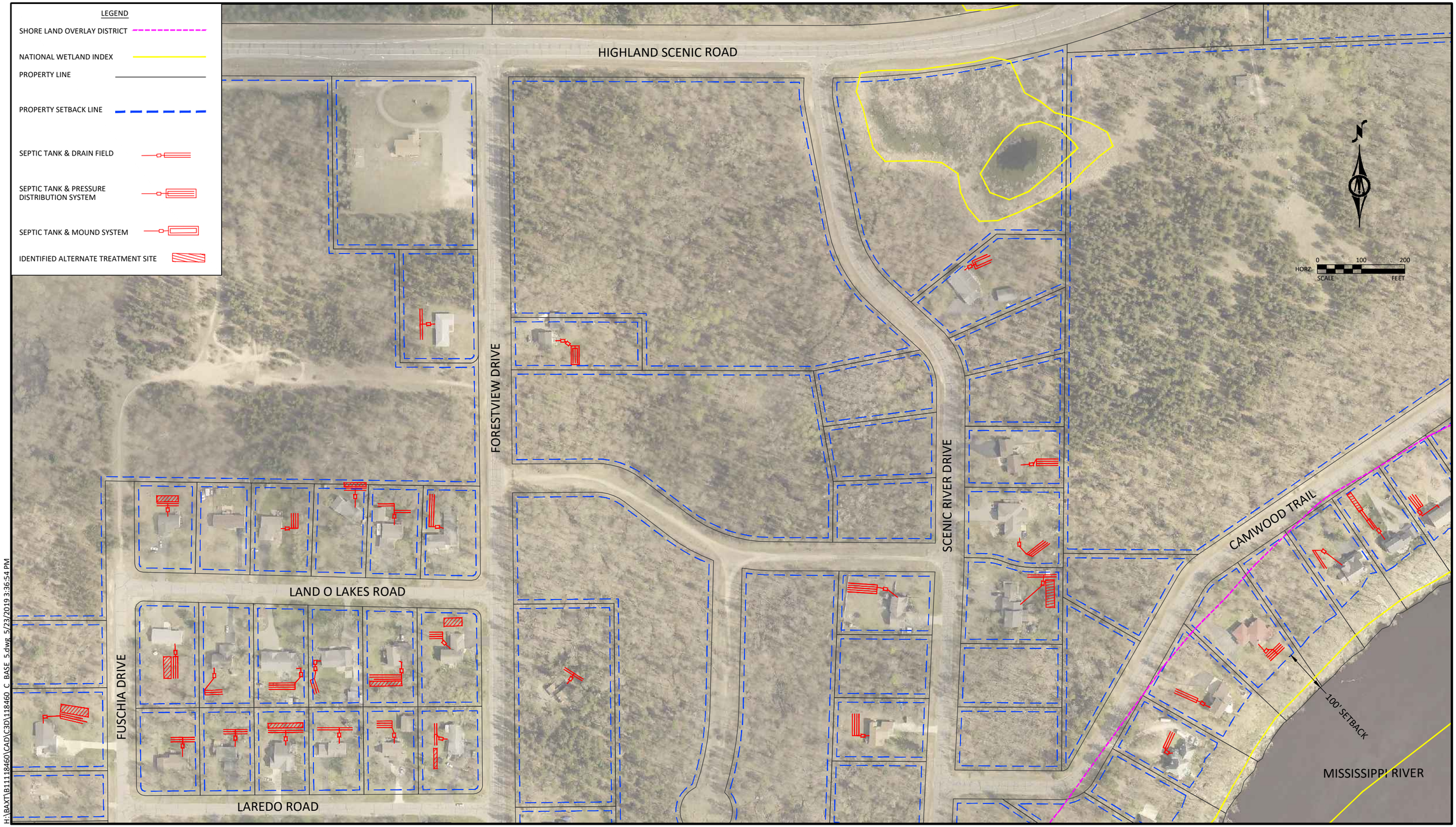
2019 SEPTIC SYSTEM INVENTORY

CITY OF BAXTER

AREA 5 BASEMAP

MAY 2019

BOLTON & MENK



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2019 SEPTIC SYSTEM INVENTORY

CITY OF BAXTER

AREA 5 BASEMAP

MAY 2019

BOLTON & MENK

LAREDO ROAD

FUSCHIA DRIVE

MISSISSIPPI ROAD

FORESTVIEW DRIVE

SCENIC RIVER DRIVE

RIVER VISTA COURT

100' SETBACK

MISSISSIPPI RIVER

HORZ. SCALE 0 100 200 FEET

LEGEND

- SHORE LAND OVERLAY DISTRICT
- NATIONAL WETLAND INDEX
- PROPERTY LINE
- PROPERTY SETBACK LINE
- SEPTIC TANK & DRAIN FIELD
- SEPTIC TANK & PRESSURE DISTRIBUTION SYSTEM
- SEPTIC TANK & MOUND SYSTEM
- IDENTIFIED ALTERNATE TREATMENT SITE

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2019 SEPTIC SYSTEM INVENTORY

CITY OF BAXTER

AREA 5 BASEMAP

MAY 2019

BOLTON & MENK

TRUNK HIGHWAY 371

MARYLAND ROAD

FORESTVIEW DRIVE

MEDFORD ROAD

RIVER VISTA DRIVE

RIVER VISTA COURT

100' SETBACK

MISSISSIPPI RIVER

LEGEND

- SHORE LAND OVERLAY DISTRICT
- NATIONAL WETLAND INDEX
- PROPERTY LINE
- PROPERTY SETBACK LINE
- SEPTIC TANK & DRAIN FIELD
- SEPTIC TANK & PRESSURE DISTRIBUTION SYSTEM
- SEPTIC TANK & MOUND SYSTEM
- IDENTIFIED ALTERNATE TREATMENT SITE

N

HORZ. SCALE 0 100 200 FEET

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2019 SEPTIC SYSTEM INVENTORY

CITY OF BAXTER

AREA 5 BASEMAP

MAY 2019

BOLTON & MENK

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2019 SEPTIC SYSTEM INVENTORY

CITY OF BAXTER

AREA 5 BASEMAP

MAY 2019

BOLTON & MENK

TRUNK HIGHWAY 371

FORESTVIEW DRIVE

RIVERWOOD ROAD

PARKVIEW CIRCLE

100' SETBACK

MISSISSIPPI RIVER

0 100 200

HORZ. SCALE FEET

LEGEND

SHORE LAND OVERLAY DISTRICT

NATIONAL WETLAND INDEX

PROPERTY LINE

PROPERTY SETBACK LINE

SEPTIC TANK & DRAIN FIELD

SEPTIC TANK & PRESSURE DISTRIBUTION SYSTEM

SEPTIC TANK & MOUND SYSTEM

IDENTIFIED ALTERNATE TREATMENT SITE

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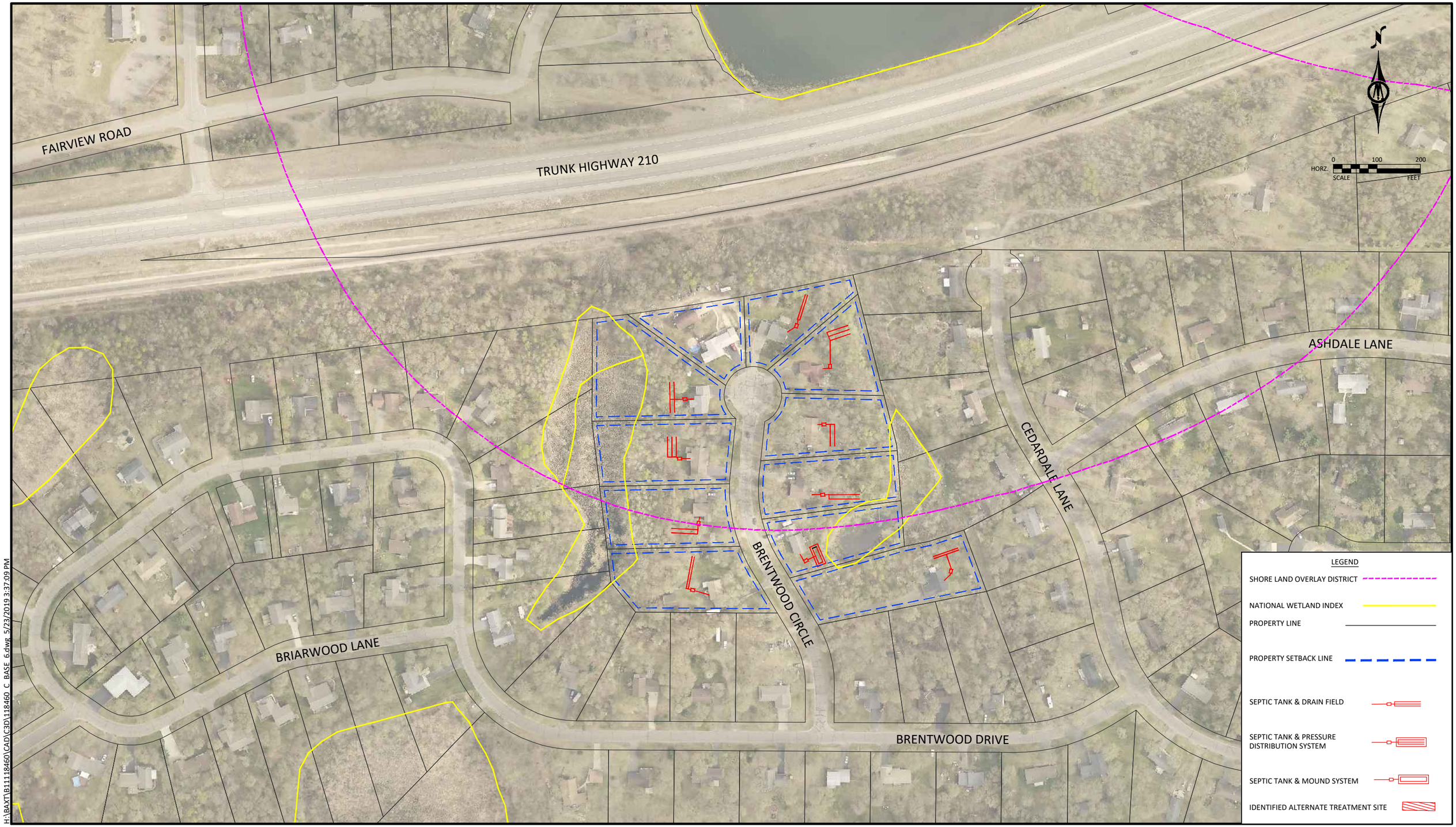
2019 SEPTIC SYSTEM INVENTORY

CITY OF BAXTER

AREA 6 BASEMAP

MAY 2019

BOLTON & MENK



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Appendix F: Septic Tank Volumes

Septic Tank Capacity

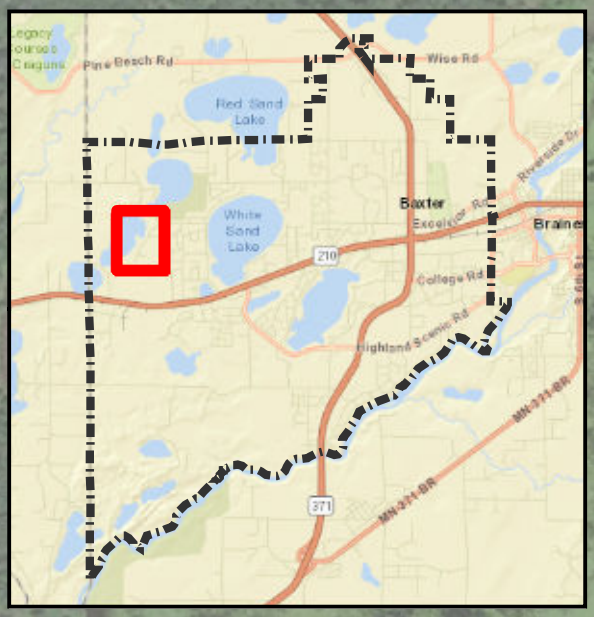
City of Baxter, MN

Area 1

May 2019

BOLTON & MENK

Real People. Real Solutions.



CEDAR SCENIC RD

BROWNSVILLE CIR

DEERWOOD RD

OLIVEWOOD DR

PINEWOOD RD

Legend

Septic Tank Capacity (Gal)

0 - 1499

≥1500

0 400 Feet

Source: ESRI, Crow Wing County

Map Document: \\arcserver1\GIS\BAXTB11118460\ESRI\Maps\Septic Tank Size\118460_SepticTank_Area1_85x11P.mxd | Date Saved: 5/16/2019 12:12:25 PM

Septic Tank Capacity

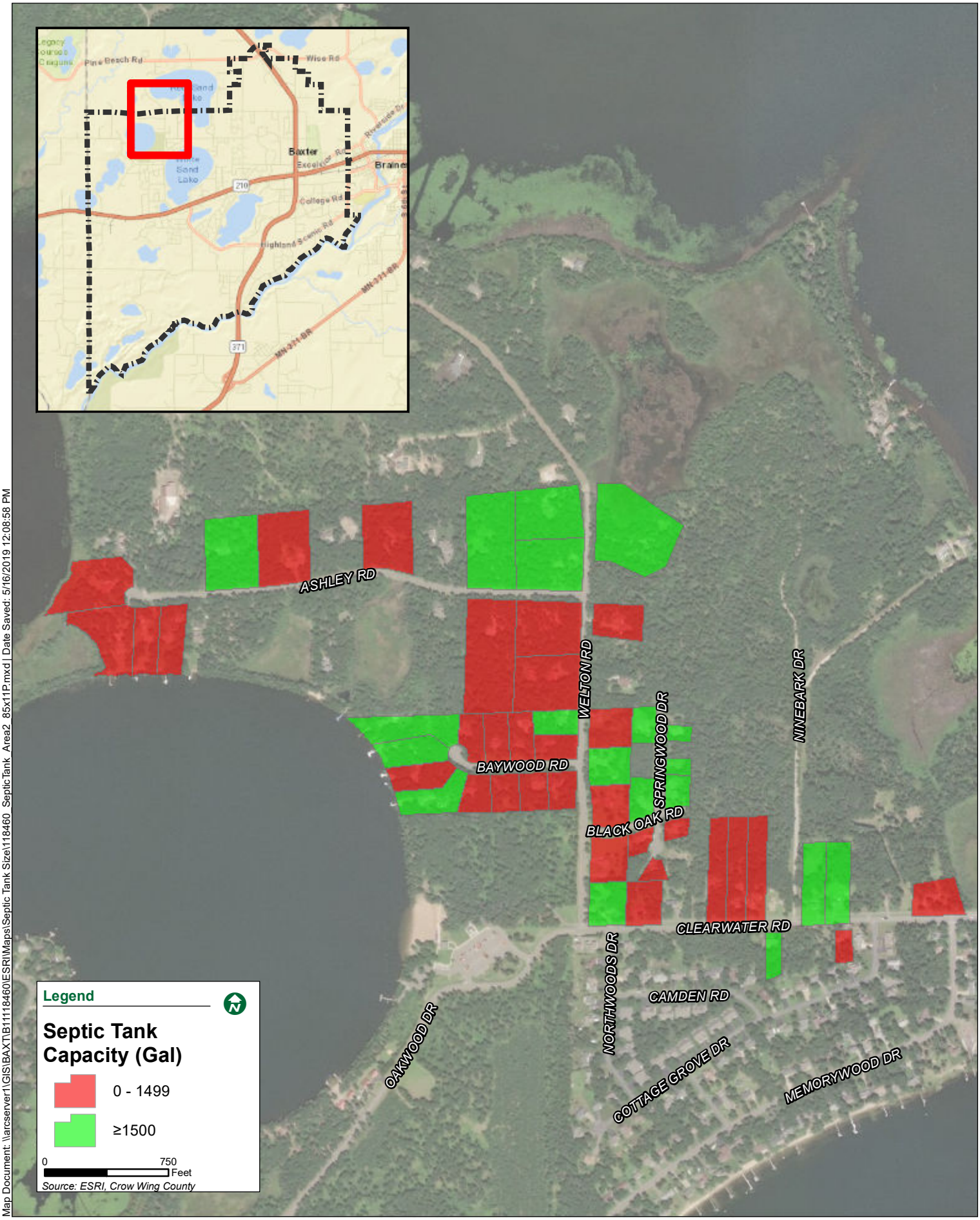
City of Baxter, MN

Area 2

May 2019

BOLTON & MENK

Real People. Real Solutions.



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Septic Tank Capacity

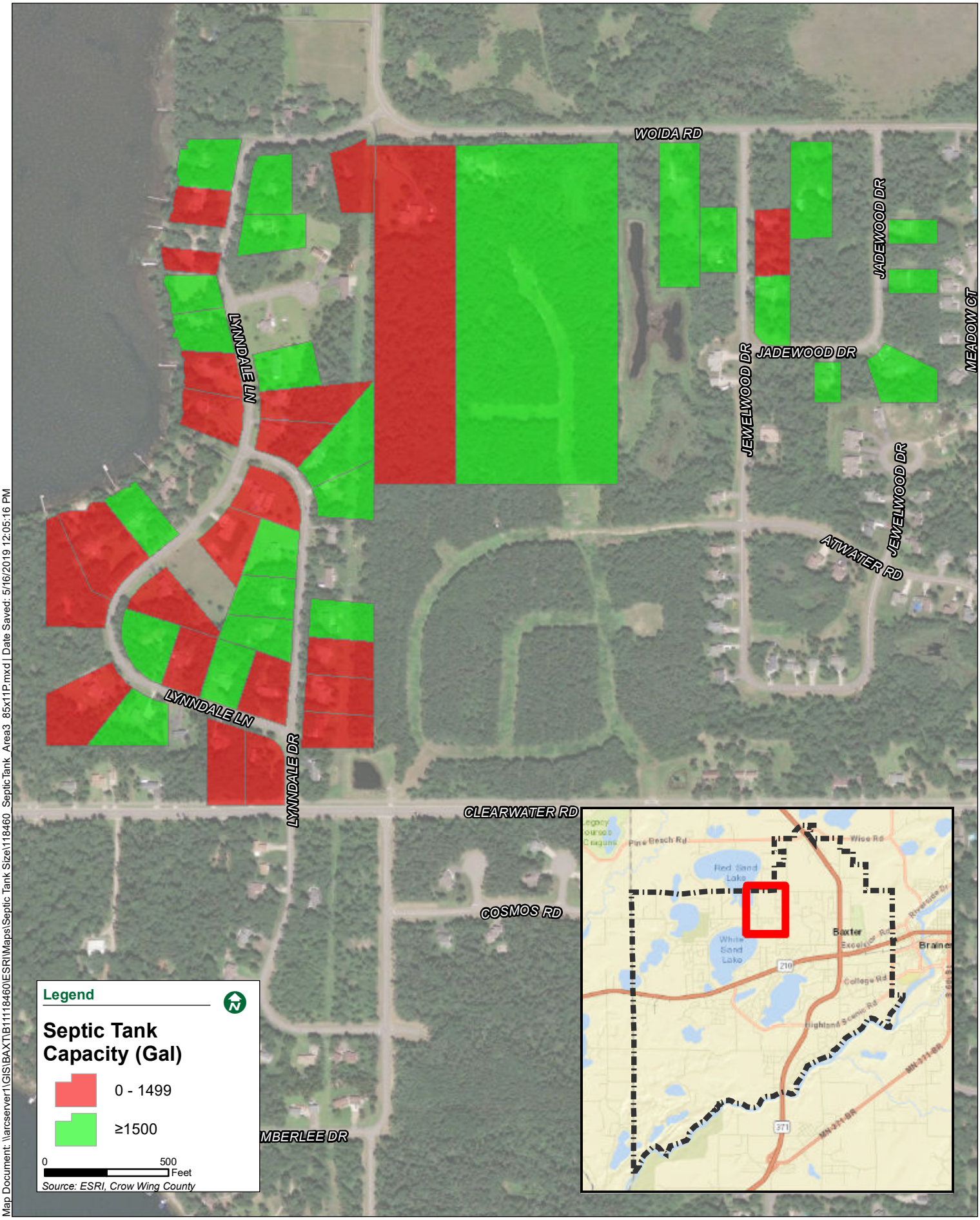
City of Baxter, MN

Area 3

May 2019

BOLTON & MENK

Real People. Real Solutions.



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Septic Tank Capacity

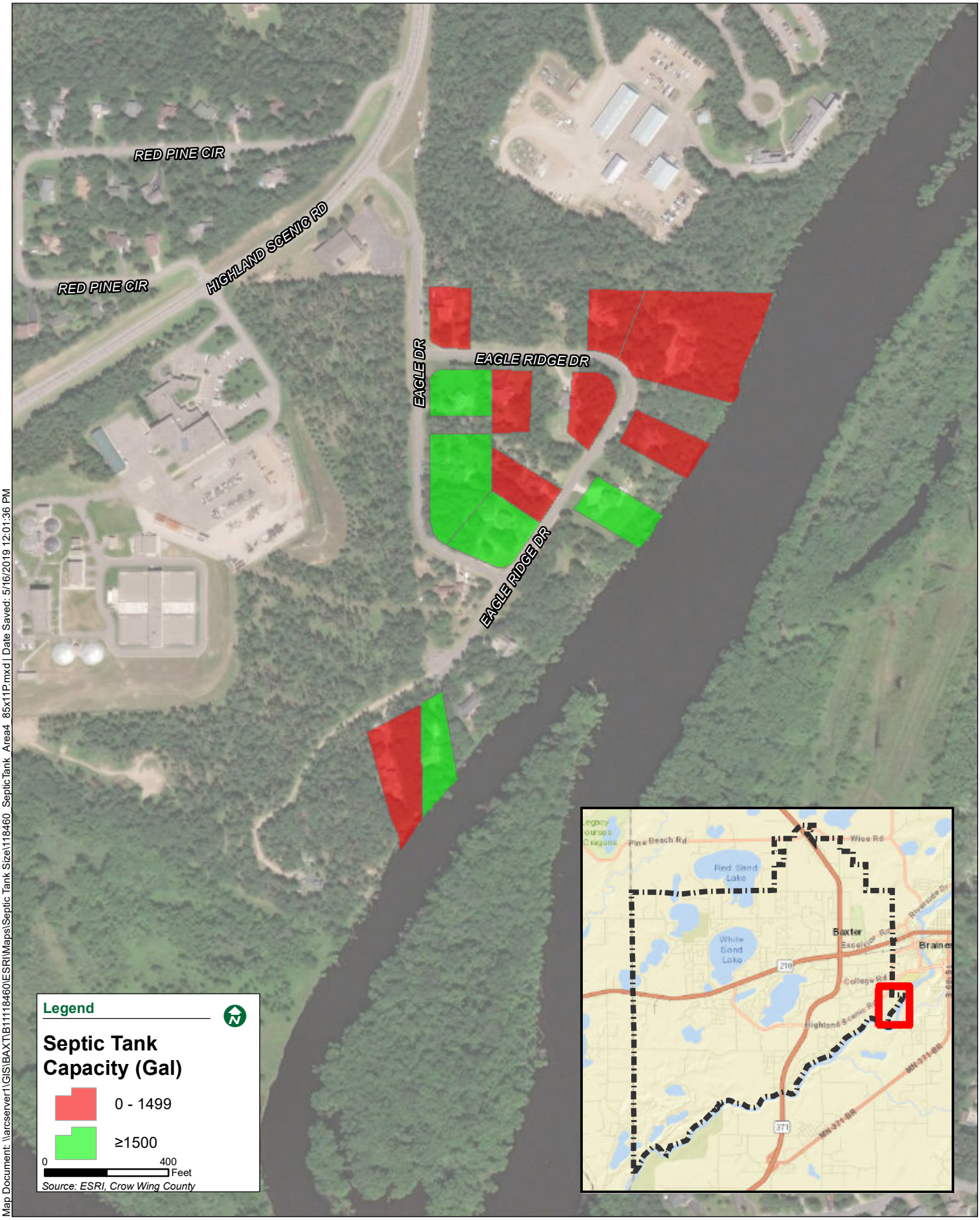
City of Baxter, MN

Area 4

May 2019

BOLTON & MENK

Real People. Real Solutions.



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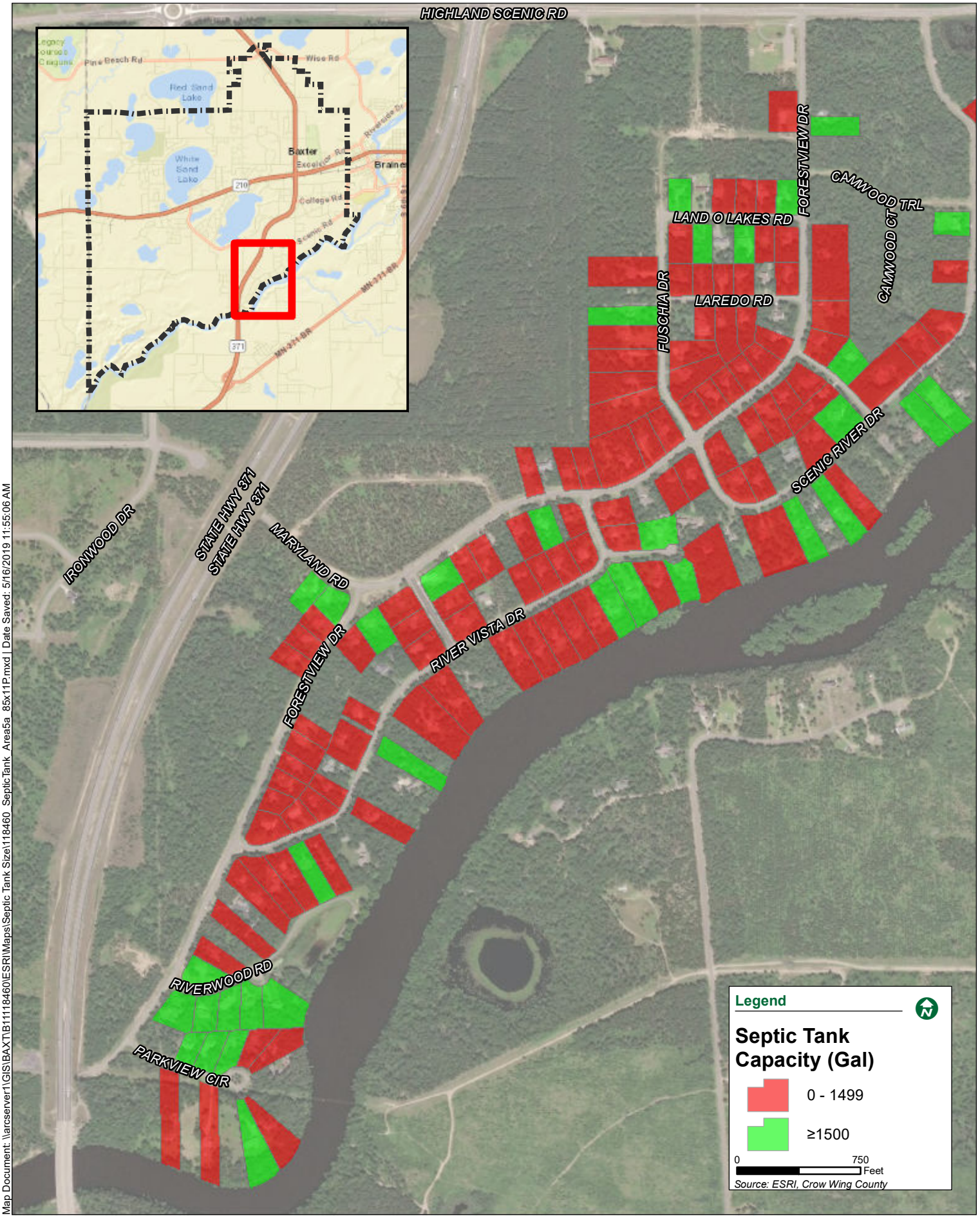
Septic Tank Capacity

City of Baxter, MN

Area 5a

May 2019

BOLTON & MENK
Real People. Real Solutions.



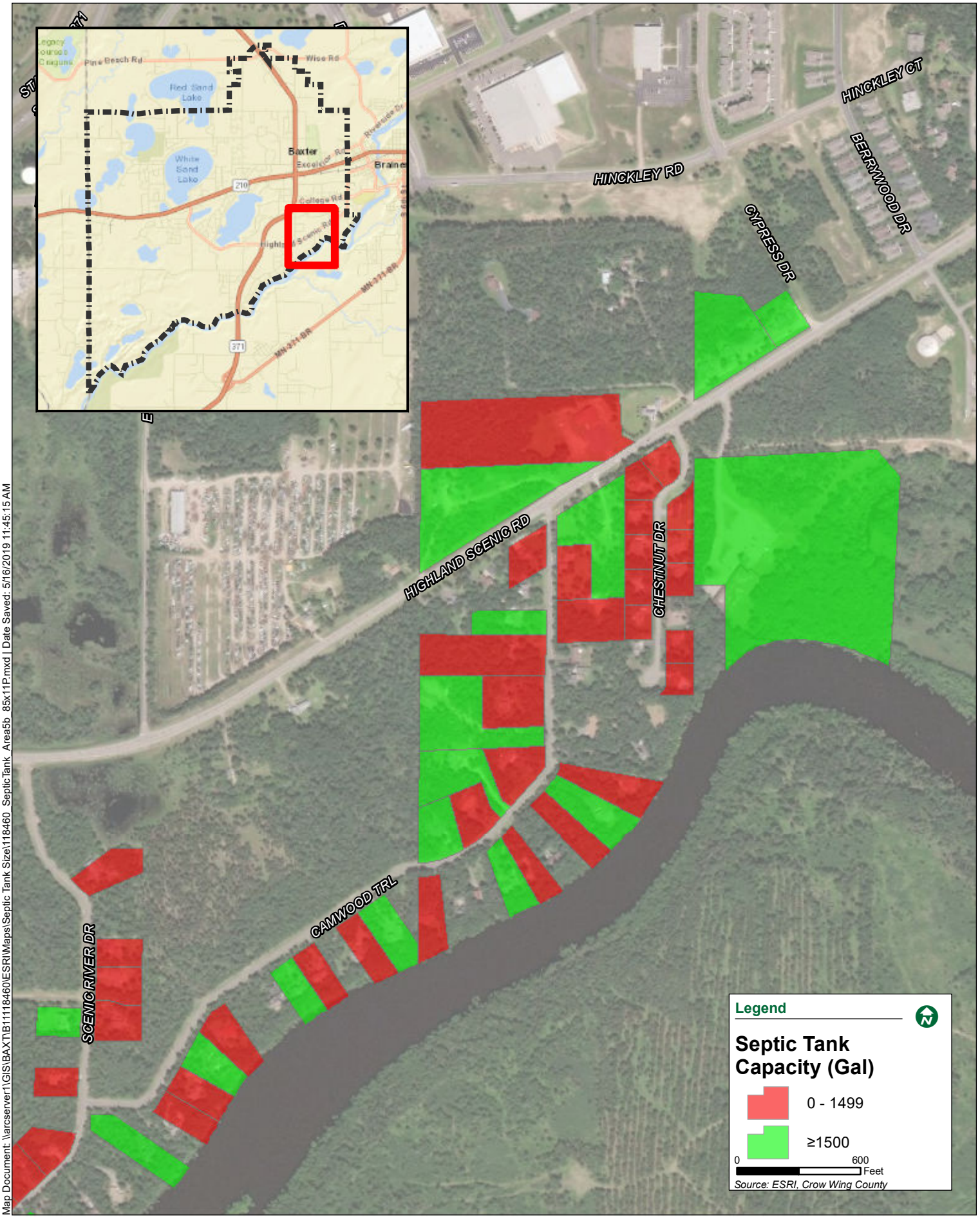
Septic Tank Capacity

City of Baxter, MN

Area 5b

May 2019

BOLTON & MENK
Real People. Real Solutions.



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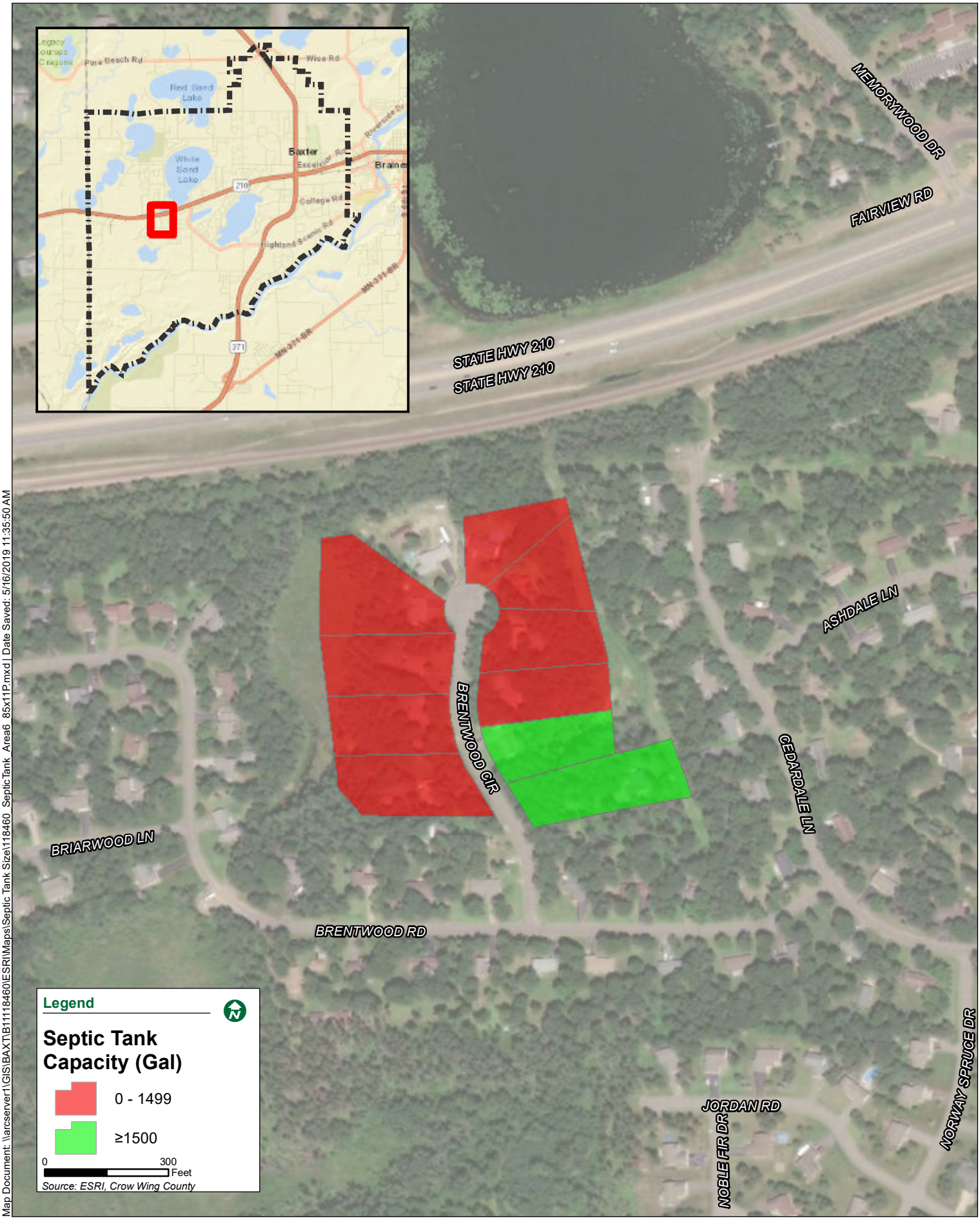
Septic Tank Capacity

City of Baxter, MN

Area 6

May 2019

BOLTON & MENK
Real People. Real Solutions.



Legend

Septic Tank Capacity (Gal)

- 0 - 1499
- ≥1500

0 300 Feet

Source: ESRI, Crow Wing County

Map Document: \\arcserver1\GIS\BAXTB11118460\ESRI\Maps\Septic Tank Size\118460_SepticTank_Area6_85x11P.mxd | Date Saved: 5/16/2019 11:35:50 AM

Appendix G: Private Well Depth

Well Depths

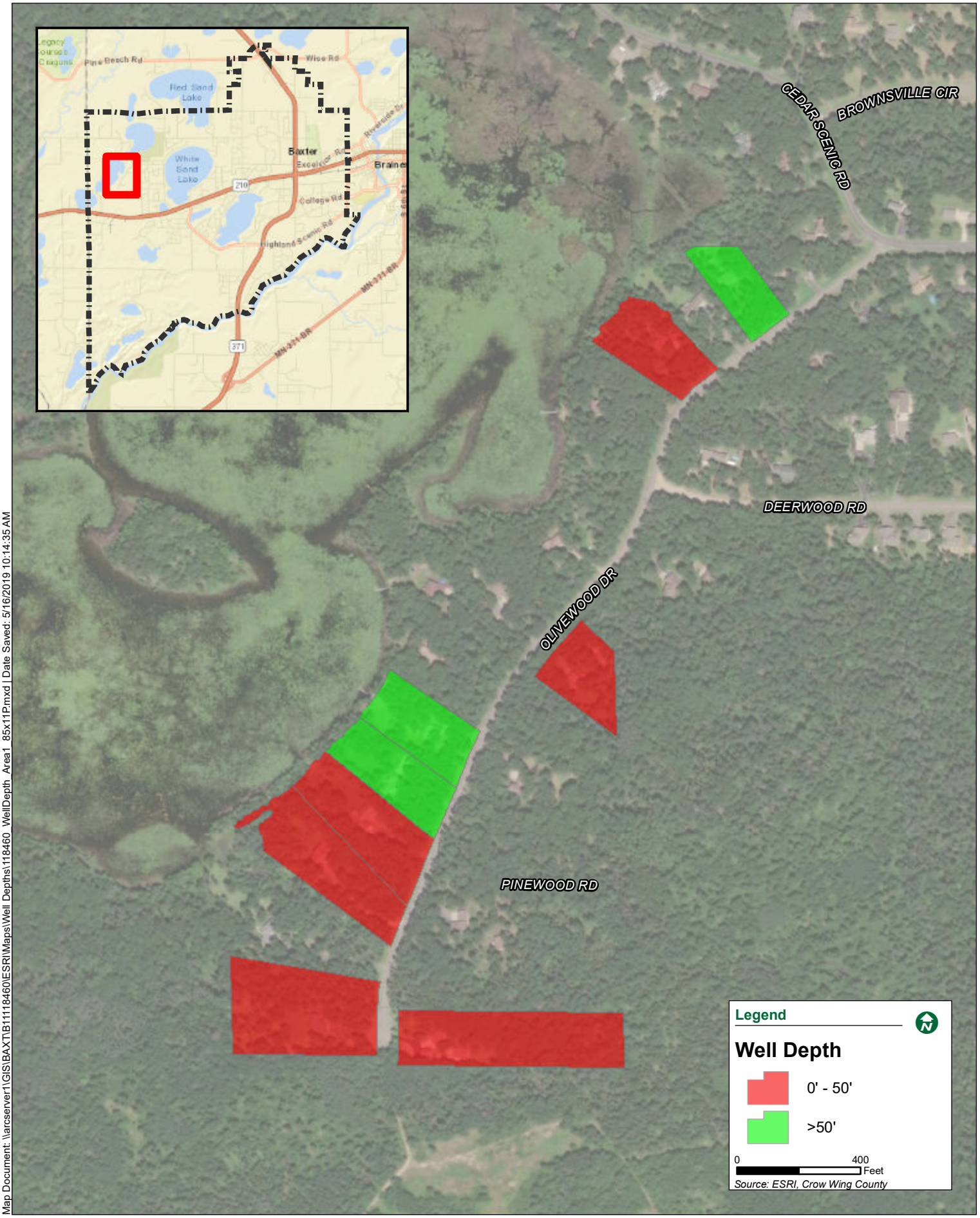
City of Baxter, MN

Area 1

May 2019

BOLTON & MENK

Real People. Real Solutions.



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Well Depths

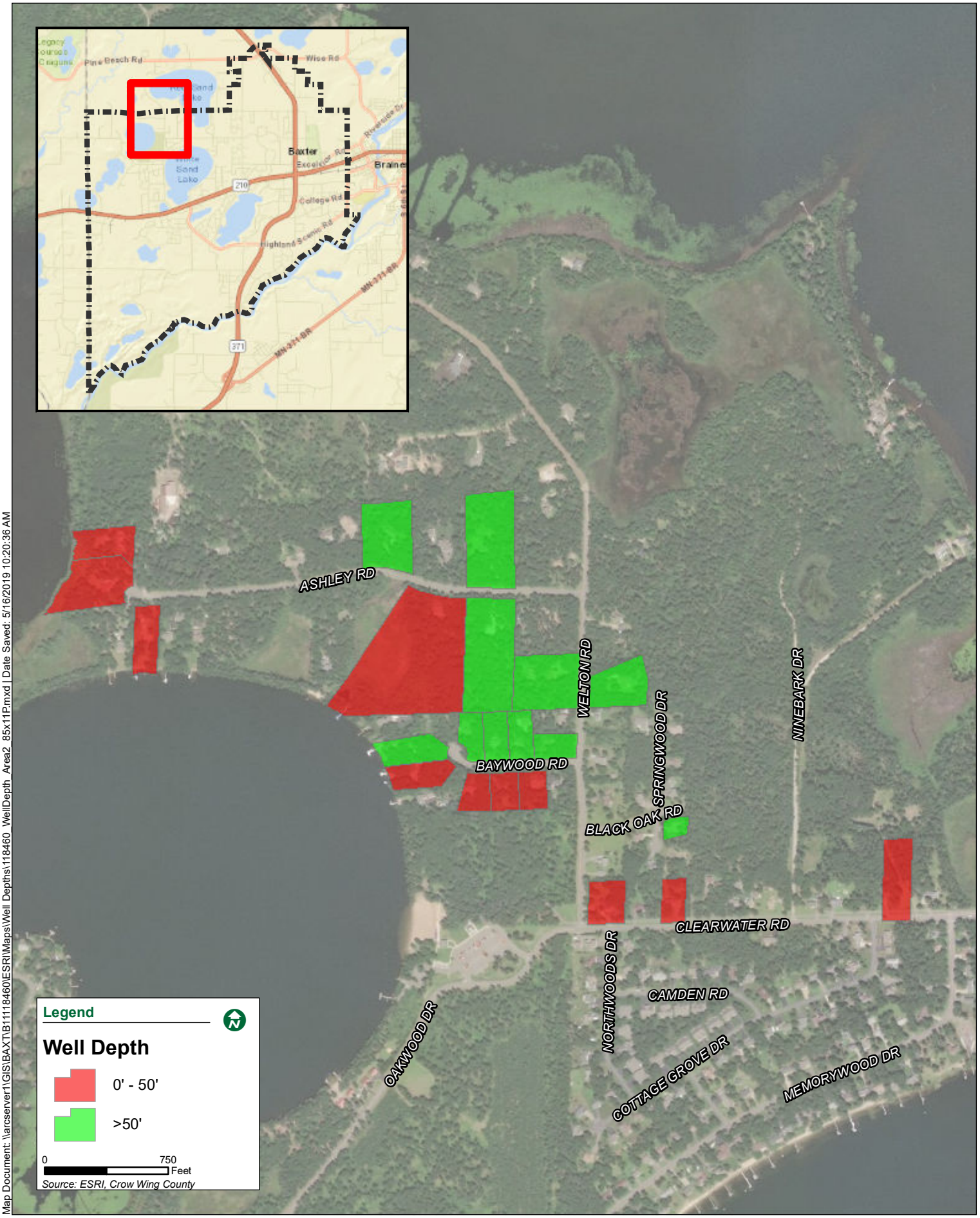
City of Baxter, MN

Area 2

May 2019

BOLTON & MENK

Real People. Real Solutions.



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Well Depths

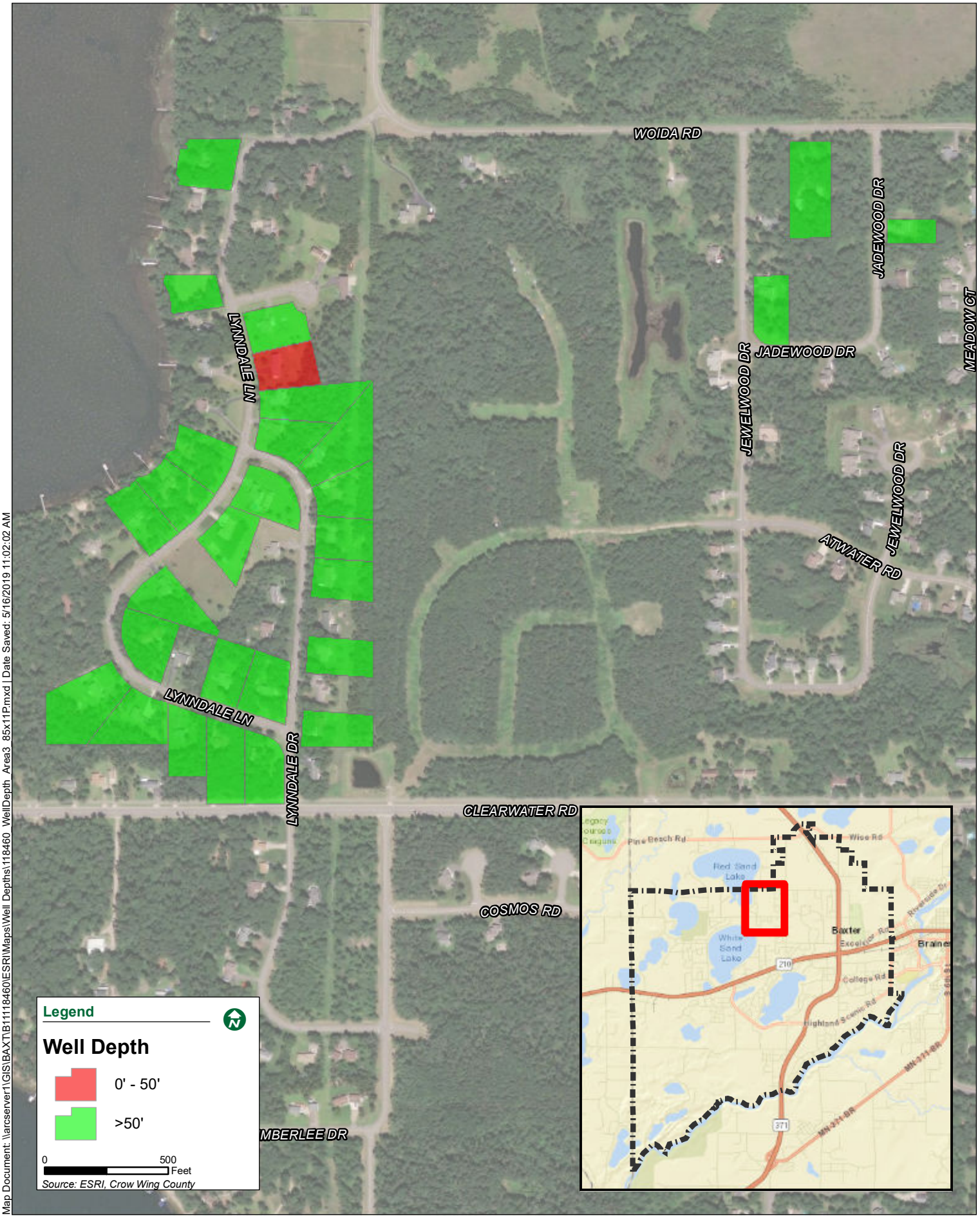
City of Baxter, MN

Area 3

May 2019

BOLTON & MENK

Real People. Real Solutions.



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Well Depths

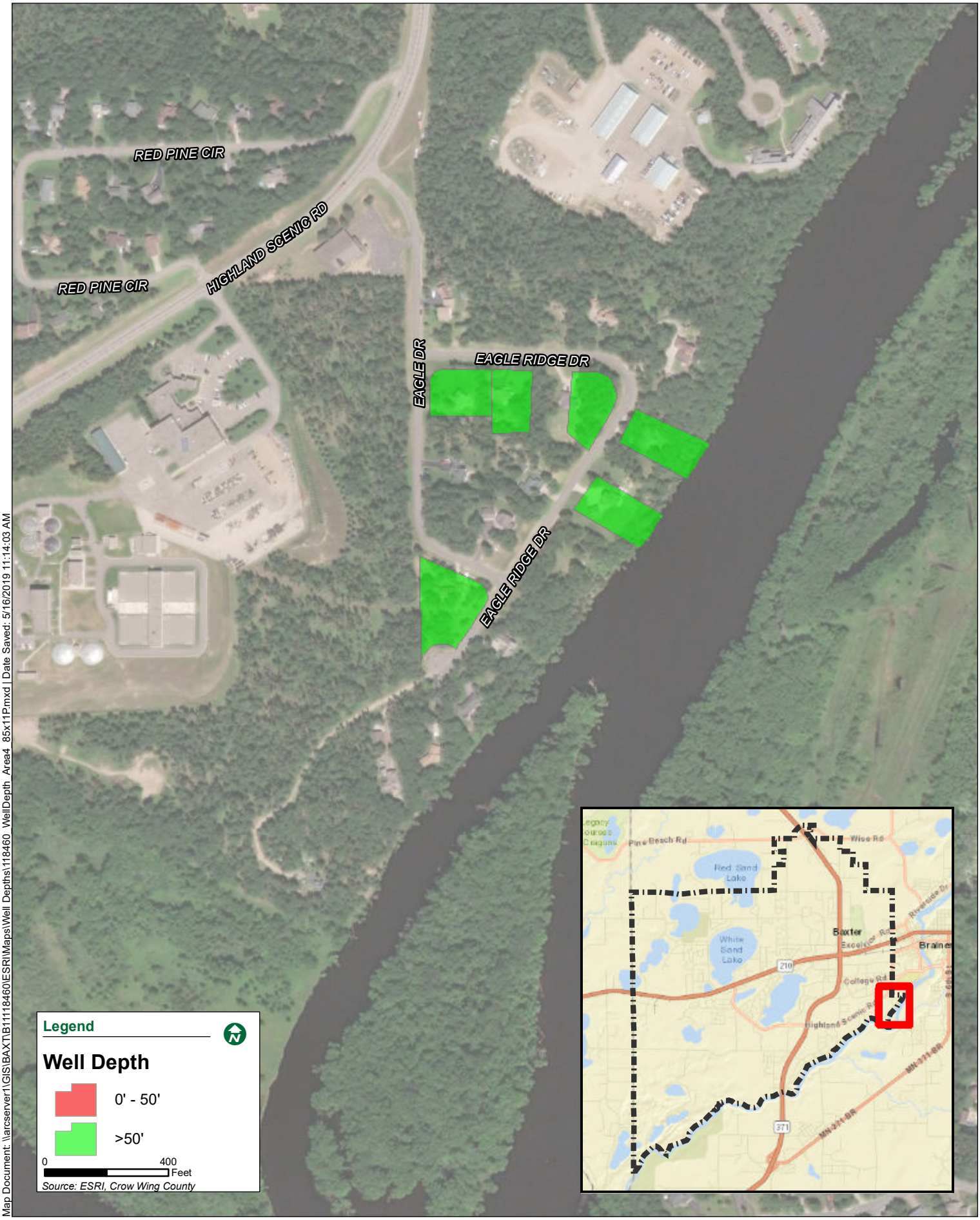
City of Baxter, MN

Area 4

May 2019

BOLTON & MENK

Real People. Real Solutions.



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Well Depths

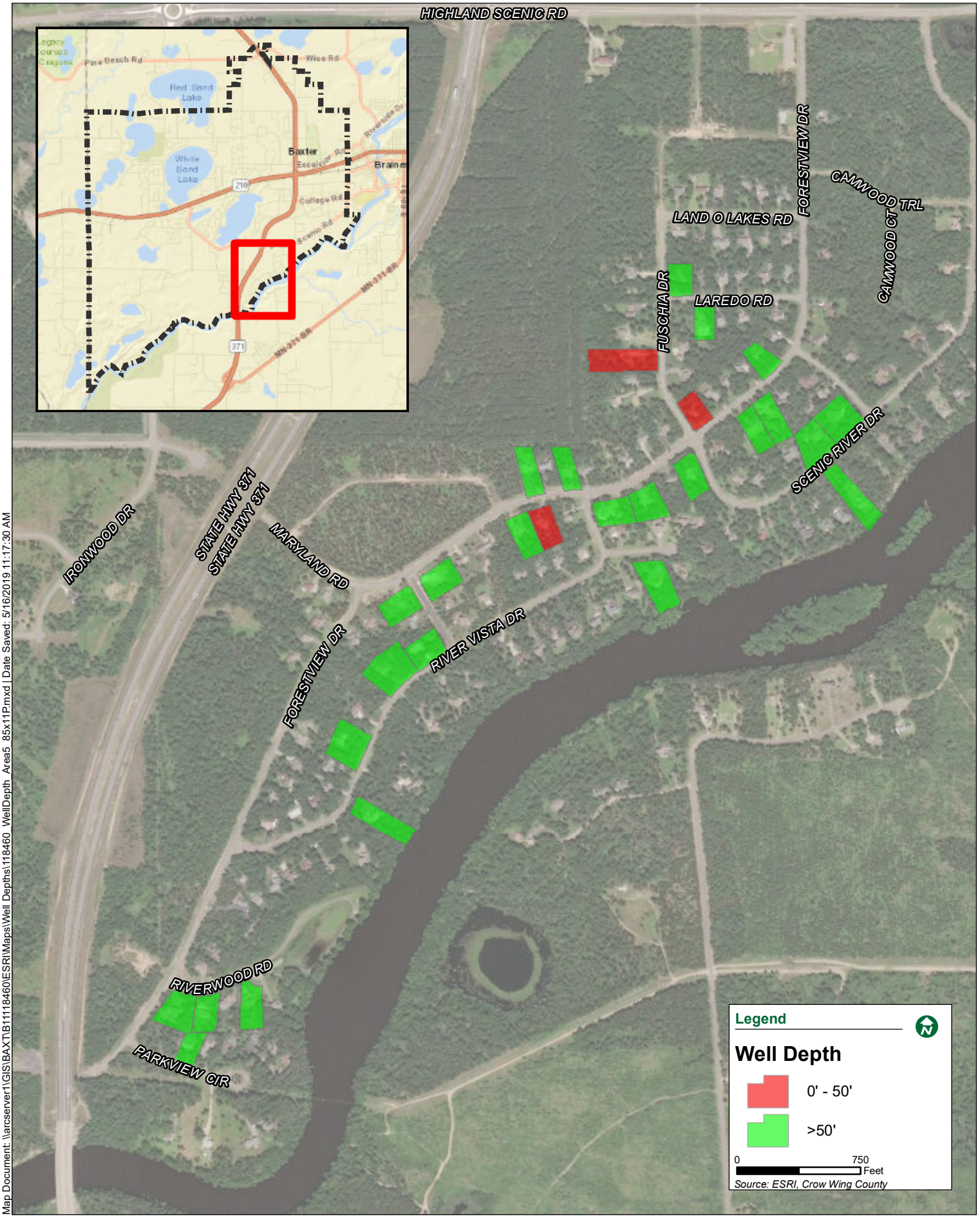
City of Baxter, MN

Area 5a

May 2019

BOLTON & MENK

Real People. Real Solutions.



Well Depths

City of Baxter, MN

Area 5b

May 2019

BOLTON & MENK

Real People. Real Solutions.