



Phase I Environmental Site Assessment

PIN #1602921240002

Lake Elmo, Minnesota

Prepared for
3M

May 2019

Phase I Environmental Site Assessment

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1.0 Introduction

Barr Engineering Co. (Barr) was retained by 3M to complete a Phase I Environmental Site Assessment (Assessment) of a property owned by 3M and used for agriculture. The property is located in the W ½, Section 16, T29N, R21W, near Lake Elmo, Washington County, Minnesota (Property). The Property consists of PIN #1602921240002. The Property location is shown on Figure 1.

This report summarizes the findings, opinions, and conclusions of the Assessment. Detailed descriptions of the Property setting, utility information, land-use history, regulatory history, and current Property conditions and features are presented in the Phase I documentation in Appendix A. Informational resources are described in Section 5 of this report and are assigned unique reference numbers, which are used throughout the report and Appendix A.

Barr has performed this Assessment in conformance with ASTM, International (ASTM) Practice E 1527-13 (Practice). No intentional deviations from the Practice were made in performing this Assessment except as described in Section 1.4. In following the Practice, this Assessment also complies with the U.S. Environmental Protection Agency 40 CFR Part 312 Standards and Practices for All Appropriate Inquiries; Final Rule.

1.1 Purpose

The purpose of the Assessment is to identify recognized environmental conditions (RECs) in connection with the Property as defined by the Practice and discussed in the findings and opinions section of the report, and to assess the property for 3M Real Estate.

1.2 Scope of Services

The Assessment involved completion of the following five components described in Section 7 of the Practice: records review, site reconnaissance, interviews, reporting, and file reviews. The following tasks were completed during the Assessment. The details of each task are described below and in Appendix A.

Records Review

- A Regulatory Database Report was obtained and federal, state, and readily available tribal records databases were reviewed.
- USGS topographic maps were reviewed and used to determine physical setting information.
- Land title information provided by the User was reviewed.
- Discretionary physical setting sources including Minnesota Department of Health well and boring records for wells in the Property vicinity and published geological reports were reviewed and used to determine physical setting information.
- Historical aerial photographs; historical topographic maps; reverse city directories; and zoning and tax assessor's records were reviewed for the Property and surrounding land.
- A fire insurance map search was conducted and no fire insurance maps were available for the Property.
- One previous Phase I ESA relevant to a portion of the Property was reviewed.

- The Minnesota Pollution Control Agency's (MPCA) What's in My Neighborhood (WIMN) and Environmental Protection Agency's (EPA) Cleanups in My Community were reviewed to supplement regulatory data.

Site Reconnaissance

- A visual inspection was conducted of the building interiors and exterior features on the Property. Current conditions with respect to land use; chemical and waste storage, use, and disposal; facility operations and equipment; utilities; and evidence of potential releases of petroleum products or hazardous substances were documented, if observed. Evidence of historical uses or conditions, if encountered, was also documented. Current land-use and occupants of neighboring properties were documented during the site visit.

Interviews

- Interviews were conducted with the Property representative and the City of Lake Elmo public works department.

Evaluation and Report Preparation

- This report was prepared to document the resources used during completion of the Assessment and to describe the findings, opinions, and conclusions of the Assessment.

File Review

- The Property was not identified on any of the standard environmental record sources, so a file review for the Property was not conducted.
- Adjoining properties were identified on multiple standard environmental record sources. A file review for one adjoining property was conducted.

1.3 Significant Assumptions

No significant assumptions were made to complete the Assessment.

1.4 Limitations, Exceptions, and Data Gaps

The following limitations and exceptions are associated with this Assessment:

- Gaps of greater than five years in historical documentation are present, and are summarized in the following table.

Date Range	Property Changes
Prior to 1936	Historical documentation was not readily ascertainable; therefore, changes in general Property land-uses are unknown.
1936-1946, 1953-1964, 1966-1974, 1978-1984, 1997-2006	Gaps greater than five years in historical documentation are present; however, general Property land-uses did not change during the time periods.

- Representative portions of the Property were observed by driving and by foot during the site visit, and some portions of the property were not directly visited beyond viewing from a distance due to the large parcel size.
- The above limitations are not considered significant data gaps that affect the ability of the EP to identify RECs on the Property.

1.5 Special Terms and Conditions

The Assessment was conducted in accordance with an Agreement between Barr and 3M.

The scope of the Assessment did not involve the collection and analysis of any type of sample. The Assessment did not involve completion of any surveys or the offering of any opinions or advice with respect to structural engineering matters, asbestos-containing materials, radon, lead-based paint, lead in drinking water, wetlands, compliance with environmental regulations, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, biological agents, mold, or other conditions that are beyond the scope of the Practice.

Barr has performed its work in a manner consistent with the care and skill ordinarily exercised by members of the environmental profession under similar budget and time constraints. Within this context, Barr assumes responsibility for its own observations, along with its interpretation of the information gathered. No other warranty is made or intended.

Because Barr was not retained to verify information, Barr assumes no responsibility for the accuracy of information that it obtained from other sources including, without limitation, regulatory and government agencies, persons interviewed about the Property, and vendors of public data. Performance of the Practice is intended to reduce, but will not eliminate uncertainty regarding the presence of recognized environmental conditions on the Property. To the extent that Barr does not identify recognized environmental conditions on the Property, Barr's opinions in the report are not representations that the Property is free of such conditions. Under no circumstances can Barr represent or warrant that releases of hazardous substances or petroleum products do not exist on the Property.

1.6 User Reliance

The Assessment has been prepared for the exclusive use of 3M, herein referred to as the "User". No others may rely on the Assessment without obtaining a formal authorization in the form of a reliance letter from Barr. Barr will provide reliance letters for additional parties only if authorized by the User.

2.0 Site Description

2.1 Location and Legal Description

The property is located in the W ½, Section 16, T29, R21, near Lake Elmo, Washington County, Minnesota (Property). The Property consists of PIN #1602921240002. The Property is approximately 3,500 feet by 2,600 feet and 172.61 acres in size. The Property boundaries are shown on Figure 2.

2.2 Property Setting and Land Use

Topography of the Property is hilly north of 34th Street and slopes downward to a drainage ditch running west to east through the Property. South of 34th Street the Property slopes downwards to the southeast (Ref. 5b). Shallow groundwater flow direction at the Property is reportedly to be to the south/southeast based on the Washington County Geologic Atlas (Ref. 2a), although the flow direction of the shallow groundwater is believed to be influenced by local discharge/recharge points, the presence of confining layers, and groundwater withdrawals and land use in nearby areas (Ref. 5f). Regional groundwater flow in the St. Peter sandstone and the Prairie du Chien group, is generally to the southwest (Ref. 5f).

The Property is currently used for agriculture and is zoned Rural Residential (Ref. 5e). No buildings are located on the Property (Refs. 1a, 5b). The Property is not connected to water or sewer (Ref. 4c). Historically the Property has been used for agricultural activities (Ref. 1a). No historical buildings were identified on the Property (Ref. 1a).

The current use of adjoining properties includes residential, agricultural, and commercial (Ref. 5b). The past use of adjoining properties includes agricultural and residential (Ref. 1a).

Additional descriptions of the Property setting and land-use are presented in Appendix A.

2.3 User-Provided Information

As detailed in Section 6 of the Practice, the User has responsibilities associated with identifying possible recognized environmental conditions in connection with the Property. Barr provided a User Questionnaire to facilitate gathering information required by the Practice. The completed User Questionnaire is included in Appendix F.

The User has no knowledge of any environmental liens or activity and use limitations against the Property, nor any specialized knowledge or experience that is material to identifying recognized environmental conditions in connection with the Property. Since no sale is pending or imminent, no information was provided to the environmental professional regarding the relationship between a potential purchase price and fair market value. Property valuation is not part of the scope of this Assessment. The User did not report conditions indicative of releases or threatened releases, any obvious indicators that point to the presence or likely presence of contamination at the Property, or specialized knowledge about the Property related to the items listed in Section 6 of the Practice (Ref. 4b, Appendix F).

3.0 Findings and Opinions

This section summarizes observations regarding the presence of hazardous substances or petroleum products on the Property (findings) and discusses the basis for concluding if a finding is or is not a recognized environmental condition.

3.1 Definitions

Finding – For the purpose of this Assessment, a finding is an observation regarding the presence of hazardous substances or petroleum products on the Property which may be considered a recognized environmental condition, a historical recognized environmental condition, or de minimis condition.

Recognized environmental condition (REC) - A REC is defined by the Practice as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.”

Historical recognized environmental condition (HREC) - An HREC is defined by the Practice as “a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a historical recognized environmental condition, the environmental professional must determine whether the past release is a recognized environmental condition at the time the Phase I Environmental Site Assessment is conducted (for example, if there has been a change in the regulatory criteria). If the EP considers the past release to be a recognized environmental condition at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a recognized environmental condition.”

Controlled recognized environmental condition (CREC) – A CREC is defined by the Practice as “a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). A condition considered by the environmental professional to be a controlled recognized environmental condition shall be listed in the findings section of the Phase I Environmental Site Assessment report, and as a recognized environmental condition in the conclusions section of the Phase I Environmental Site Assessment report.”

De minimis conditions – As defined by the Practice, conditions determined to be “de minimis” generally do not present a threat to human health or the environment and generally would not be subject of an

enforcement action if brought to the attention of appropriate governmental agencies. De minimis conditions are not considered RECs.

3.2 Findings and Opinions

Barr has identified the following findings and developed the following opinions regarding these findings, as summarized in the following table.

Finding ID #	Description of Finding	Opinion with Respect to Finding (REC, CREC, HREC, de minimis)
Finding #1	<p>Groundwater PFAS Impacts in the East Metro Area: Nearby Superfund sites have been identified by the state as contributing sources of widespread PFAS contamination in groundwater, including the Washington County Landfill, located approximately 3,000 feet northeast of the Property, and the Oakdale Dump site, located 3,600 feet west of the Property. Both sites are estimated to be side-gradient of the Property for shallow groundwater, and the Washington County Landfill site may be upgradient of the Property for groundwater in bedrock. Drinking water advisories have been issued for private wells southeast of the Property. No wells are currently present on the Property. The Minnesota Department of Health has designated a Special Well Construction Area in this part of Lake Elmo that includes the Property, which restricts well construction in some cases and requires PFAS sampling of new wells in other cases in order to prevent exposure to PFAS. City water is available near the Property. Additionally, the state is currently implementing area-wide investigations and remedial efforts to address PFAS in the East Metro Area.</p>	<p>The PFAS in groundwater is a regional concern and institutional controls are in place to address PFAS in Lake Elmo groundwater, therefore this finding is not considered a REC.</p>
Finding #2	<p>Miscellaneous Debris: Occasional areas of miscellaneous, inert debris were observed dispersed across the site. Observed materials included wood, metal fragments, plastic and glass shards, a small ash pile, and a stack of cinder blocks.</p>	<p>Based on the quantity and nature of the debris, this finding is considered a de minimis condition and is not a REC.</p>
Finding #3	<p>Past Agricultural Use: The Property has been used for agriculture since at least 1936 and there is potential for agricultural chemicals to have been used at the Property.</p>	<p>Because it is assumed that agricultural chemicals were applied using industry standard application rates, and no evidence of inappropriate agricultural chemical applications was identified, this finding is not a REC.</p>
Finding #4	<p>Adjoining LUST Site: One closed LUST site was reported at an east-adjointing, down-gradient parcel. Soil and groundwater contamination was reported and delineated in the regulatory records.</p>	<p>Based on the downgradient location of the LUST site, this finding is not a REC.</p>

Finding ID #	Description of Finding	Opinion with Respect to Finding (REC, CREC, HREC, de minimis)
Finding #5	Pipelines: Two pipelines were documented on the Property. One natural gas pipeline was identified running east to west along the railroad. A petroleum pipeline was identified crossing the Property from northwest to southeast.	There are no regulatory listings indicating a release from these pipelines, and there was no staining, stressed vegetation, or other indications of a release observed during the site visit. Therefore, this finding is not a REC.
Finding #6	Railroad: The Property includes two parcels that are separated by an active railroad that is present on an adjoining property (see Figure 2). The railroad tracks, ballast bedding, and adjoining ground appeared in good condition and no staining or evidence of a release was observed. There are no regulatory reports of a release related to this railroad property	Railroads can be sources of impacts to shallow soils; however, based on the lack of staining or other evidence of releases, this finding is not considered a REC.

4.0 Conclusions

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of PIN #1602921240002, the Property. Any exceptions to, or deletions from, this Practice are described in Section 1.4 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the Property.

4.1 Deviations

There were no deletions, deviations from, or additions to the Practice associated with the Assessment other than the limitations and exceptions listed in Section 1.4.

5.0 References

The following resources are numbered for use as references.

Ref #	Resource	Years Covered or Item Date
Standard Historical Resources		
1a	Aerial Photographs	2017, 2013, 2010, 2006, 1997, 1991, 1987, 1984, 1978, 1974, 1966, 1964, 1953, 1947, 1936
3	Fire Insurance Maps	Not Available
1c	Property Tax Files	Not Reviewed
1d	Recorded Land Title Records	ALTA Commitment for Title Insurance, First American Title Insurance Company File No: NCS-957660-MPLS Certificate of Title No. 61999
1e	USGS Topographic Maps	2013, 1993, 1980, 1972, 1967, 1950, 1949, 1946
1f	Local Street Directories	2014, 2010, 2005, 2000, 1995, 1992, 1987, 1982, 1977
	Building \ Department Records	Not Reviewed
1g	Zoning/Land Use Records	Not Reviewed
	Other Historical Sources	Not Reviewed
	Prior Assessments	Not Reviewed
Discretionary and Non-Standard Physical Setting Sources		
2a	Berg, J.A., 2019, Groundwater Atlas of Washington County, Minnesota: Minnesota Department of Natural Resources, County Atlas Series C-39, Part B, Report and Plates 7-9.	2019
2b	Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/	Accessed April 29, 2019
2c	Published Geologic Report – Bedrock Geology Julia Steenberg and Andrew Retzler. 2016. Geologic Atlas of Washington County, Minnesota (Atlas C-39 Part A, Plate 2). University of Minnesota, Minnesota Geological Survey. https://conservancy.umn.edu/handle/11299/178852	Accessed April 29, 2019
Standard Environmental Record Sources		
3a	EDR Report (Appendix D)	April 24, 2019
3b	<u>What's in My Neighborhood?</u> 4/24/2019. Minnesota Pollution Control Agency. 4/24/2019. < http://www.pca.state.mn.us/index.php/data/wimn-whats-in-my-neighborhood/whats-in-my-neighborhood.html >	April 24, 2019
3c	<u>Cleanups in My Community.</u> 4/24/2019. Environmental Protection Agency. 4/24/2019	April 24, 2019

Ref #	Resource	Years Covered or Item Date
	https://www.epa.gov/cleanups/cleanups-my-community	
Interviews		
4a	Property Owner/Key Site Manager: Jim Kotsmith, Manager, Corporate Environmental Programs, 651-737-3635	April 29, 2019
4b	User Representative: Jim Kotsmith, Manager, Corporate Environmental Programs, 651-737-3635	April 29, 2019
4c	Public Works/City Engineering: Kristina Handt, City Administrator, City of Lake Elmo, 651-747-3905	April 29, 2019
Supplemental Resources		
5a	Minnesota Department of Health County Well Index	April 26, 2019
5b	Site Visit Emily Cook, Environmental Engineer, 952-832-2648	April 29, 2019
5c	Previous Investigation: Natural Resource Group, Inc., 2008. Phase I Site Assessment, Lake Elmo, MN.	June 8, 2005
5d	File Review: Oakwood Animal Hospital Leak Site #19750	May 1, 2019
5e	Lake Elmo Zoning Map. Available online at http://www.lakeelmo.org/wp-content/uploads/2019/04/NewZoning3.25.2019.pdf	Accessed May 1, 2019
5f	Minnesota Department of Health Notice of Designation of Special Well Construction Area, Lake Elmo-Oakdale, Washington County, Minnesota. Available online at https://www.health.state.mn.us/communities/environment/water/docs/wells/swbca/lakeelmomemo.pdf	March 8, 2017
5g	Minnesota 3M PFC Settlement, East Metro Study Area. Available online at https://3msettlement.state.mn.us/	Accessed April 30, 2019

6.0 Signature and Qualifications of Environmental Professional

I declare that, to the best of my professional knowledge and belief, I meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Barr performed this Assessment in conformance with the ASTM, International (ASTM) Practice E 1527-13. Special terms, conditions, limitations, and exceptions that apply to the Assessment are described throughout this Report and in the Appendices.



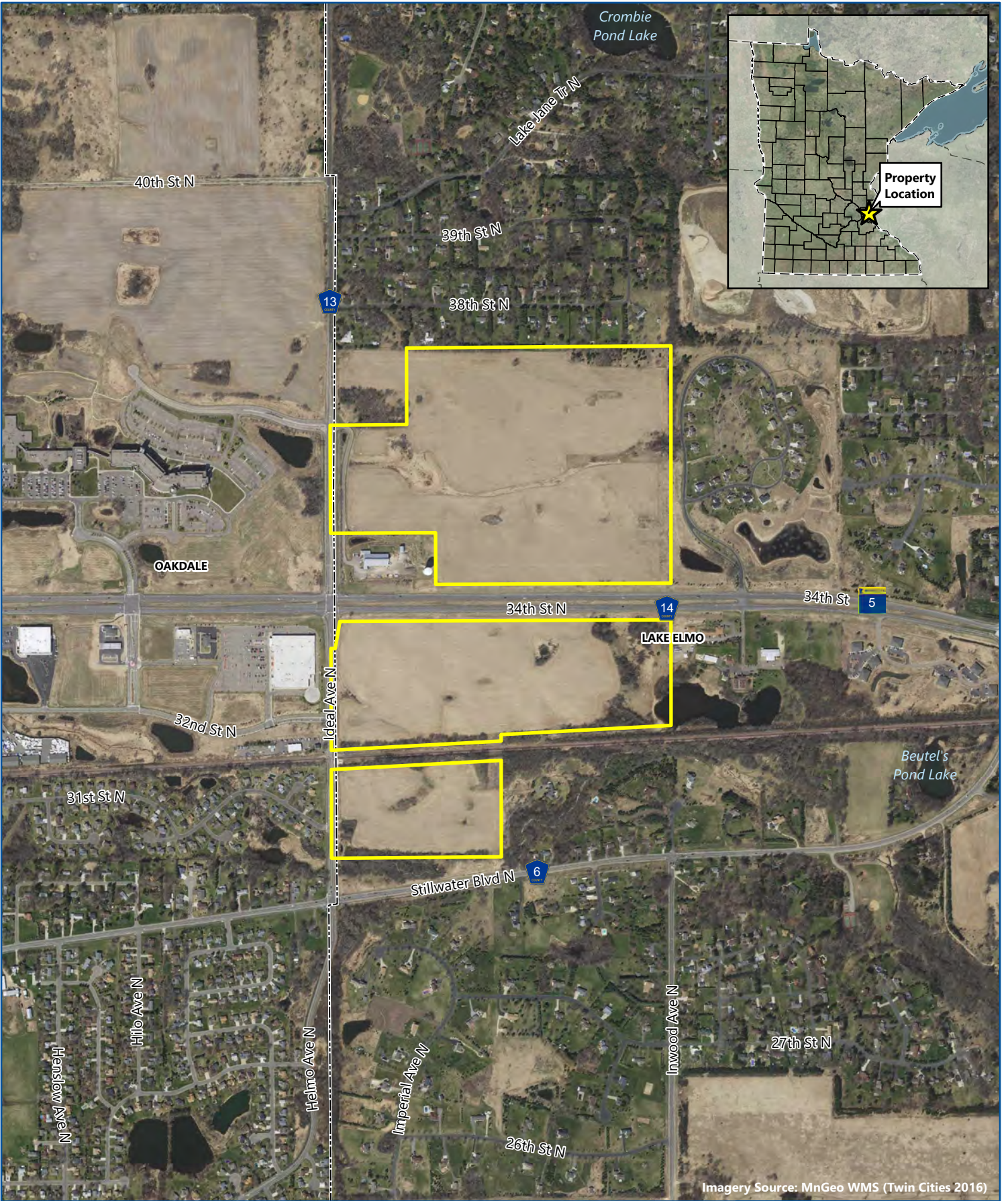
Jennifer Brekken, Environmental Professional

May 8, 2019



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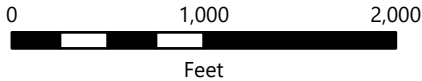
Qualifications of the Environmental Professional are summarized in Appendix G.

Figures

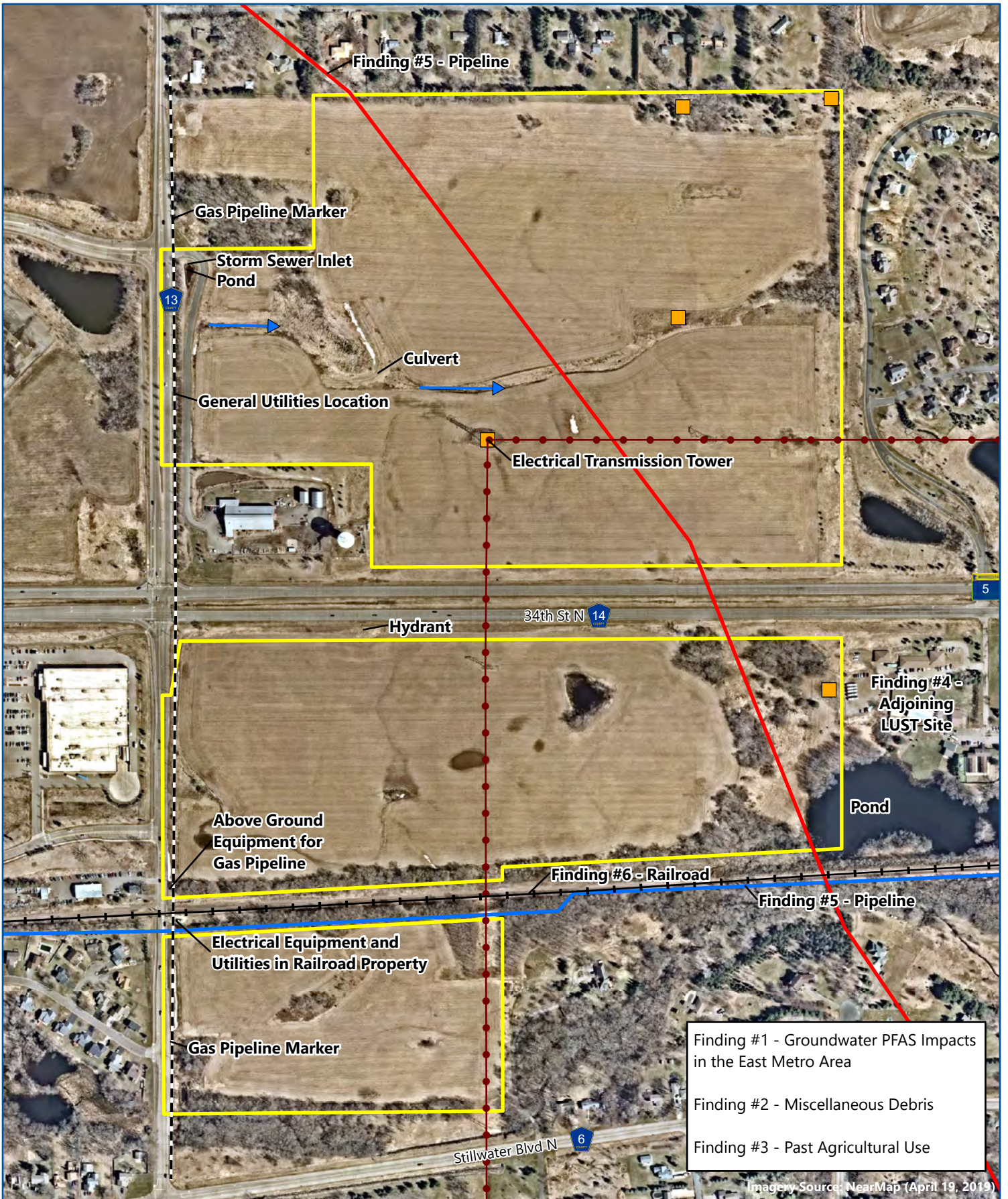


Imagery Source: MnGeo WMS (Twin Cities 2016)

-  Property Boundary (Approximate)
-  Municipal Boundary



PROPERTY LOCATION MAP
 Parcel ID 160292124002
 Lake Elmo, MN
FIGURE 1



Finding #1 - Groundwater PFAS Impacts in the East Metro Area
 Finding #2 - Miscellaneous Debris
 Finding #3 - Past Agricultural Use

Imagery Source: NearMap (April 19, 2019)

Property Boundary (Approximate)	Drainage Ditch
Natural Gas Pipeline (Approximate)	Debris
Petroleum Pipeline (Approximate)	Railroad
Overhead Electrical Line	

0 250 500
Feet

PROPERTY LAYOUT MAP
 Parcel ID 1602921240002
 Lake Elmo, MN
FIGURE 2

Appendices

Appendix A

Phase I Documentation

Appendix A

Phase I Environmental Site Assessment Documentation PIN #1602921240002 Lake Elmo, Minnesota May 2019

I. General Property Information

Property location map is shown on Figure 1. Property layout with existing and former features is shown on Figure 2.

Property name: PIN #1602921240002

County: Washington

Township: 29N **Range:** 21W **Section:** W 1/2

Property size: 172.61 acres

Current Property owner and year of purchase: 3M has owned the Property since 1966.

Current Occupant(s): None

Current Property use: Agriculture

II. Physical Setting

Surface elevation: Approximately 985 feet above mean sea level (MSL; Ref. 1e).

Topographic conditions of Property: The Property is hilly north of 34th Street and slopes downward to a drainage ditch running west to east through the Property. South of 34th Street the Property slopes downwards to the southeast (Ref. 5b).

Stratigraphy (soils and upper bedrock units): Soils at the Property consist mainly of well-drained Santiago silt loam with six to 15 percent slopes, well-drained Antigo silt loam with two to six percent slopes, and well-drained Antigo silt loam with six to 15 percent slopes (Ref. 2b). A log from a water supply well that was sealed on a nearby Property in 2007 indicates alluvial deposits overlying Platteville Limestone, located 25 feet below ground surface (bgs). The well extended into the underlying St. Peter Sandstone (Ref. 5a).

Nearest surface water body (name and distance): A pond is located on the east side of the Property south of 34th Street North (Ref. 1a, 5a). Several other nearby surface water features are present in various directions.

Anticipated groundwater depth/flow direction: The anticipated groundwater depth/flow direction is based on the log for the sealed well (Ref. 5a), Washington County Geologic Atlas (Ref. 2a), and information from MDH's 2007 Memo outlining a designation special well construction area (Ref. 5f). Shallow groundwater at the Property likely occurs in the alluvium present from 0 to 25 feet bgs, and the groundwater in the St. Peter Sandstone is approximately 60 feet bgs. The shallow groundwater reportedly flows to the south/southeast (Ref. 2a), although the flow direction of the shallow groundwater is believed to be influenced by local discharge/recharge points, the presence of confining layers, and groundwater withdrawals and land use in nearby areas. Groundwater levels and flow directions are also influenced by recharge from losing streams and by natural discharge to local lakes and streams.

Regional groundwater flow in the St. Peter sandstone and the Prairie du Chien group, is generally to the southwest.

III. Municipal Information & Utility Service to Property

The locations of Property utilities (wells, septic systems, sewer lines) are shown on Figure 2.

Water Supply

Municipal water supply and intake location(s): The City of Lake Elmo's water supply comes from the Prairie du Chein and Jordan aquifers (Ref. 4c).

Property potable/process water supply: The Property is not connected to municipal water (Ref. 4c).

Have other potable water supplies serviced the Property? If yes, describe: No. (Ref. 4a)

Sanitary Service

Type of sanitary service for the Property: The Property is not connected to sanitary service (Ref. 4c).

Have other methods of sanitary service been used at the Property? No. (Ref. 4a)

Evidence of current onsite septic systems or drain fields: No evidence of septic systems or drain fields were observed (Ref. 5b).

Stormwater Management

Is the Property serviced by stormwater drains, storm sewers, ponds or drainage ditches? No. (Ref. 4a). A storm sewer intake and manhole were observed on the access road to the Public Works facility. Culverts and ditches were also observed in the field on the Property (Ref. 5a).

Do any neighboring properties discharge to the Property? Stormwater discharges to the Property from a culvert located on the west site of the Property near the access road to the Public Works facility. The origin of the stormwater is unknown (Ref. 5b).

Property Zoning

The Property is zoned Rural Residential (Ref. 5e).

IV. Current Property Use

Current Property Waste Management

Waste is not currently generated at the Property (Ref. 5b).

V. Property, Adjoining, and Surrounding Area Regulatory Status

Regulatory database summary and supporting information is in EDR Report located in Appendix D. Only information generated through searches of databases required by ASTM 1527-13 and within the appropriate minimum search distances were reviewed.

Property and Adjoining Property Regulatory Status

Table 1

ASTM List	Address	Listing Status	Potential or Documented Release to Environment	Was a Regulatory File Review Completed?
RCRA NONGEN/NLR, FINDS, ECHO	Hilpisch Chiropractic Clinic, 8603 34 th Street N (East Adjoining)	Active	Downgradient. No evidence of release to the environment.	No, site is downgradient of Property.
WIMN, LUST, RCRA-CESQG, SRS, VAPOR	Oakwood Animal Hospital, 8611 N 34 th St (East Adjoining)	Closed	Downgradient. Closed LUST site, with noted groundwater contamination.	Yes
RCRA-CESQG, WIMN, TIER 2, UST, NPDES	Lake Elmo Public Works, 3445 Ideal Ave N (West Adjoining)	Active	Tier 2 facility listing, small quantity hazardous waste generator	No, there is no listing associated with a release to the environment.
RCRA-CESQG	CVS Pharmacy 17218, 7900 32 nd St N (West Adjoining)	Active	RCRA Generator. No evidence of release to environment.	No, there is no listing associated with a release to the environment.
RCRA-LQG, WIMN, MANIFEST, TIER 2	Target Store T2135, 7900 32 nd St N (West Adjoining)	Active	RCRA Generator. No evidence of release to environment.	No, there is no listing associated with a release to the environment.
WIMN, MANIFEST, FINDS, RCRA NONGEN/NLR, ECHO, RCRA-CESQG	Myron's Service Center/Central Sweeping, 3240 Ideal Ave N (West Adjoining)	Active	Auto shop and RCRA Generator. No evidence of release to environment.	No, there is no listing associated with a release to the environment.

Abbreviations:

- RCRA NonGen/NLR – RCRA Non-Generator
- FINDS – Facility Index System/Facility Registry System
- ECHO – Enforcement & Compliance History Information
- WIMN – What’s in my Neighborhood?
- LUST – Leak Sites
- RCRA-CESQG – RCRA Conditionally Exempt Small Quantity Generator
- SRS – Site Remediation Section Database
- VAPOR – Vapor Intrusion
- TIER 2 – Tier 2 Facility Listing
- UST – Underground Storage Tanks
- NPDES – Wastewater Permits Listing
- RCRA-LQG – RCRA Large Quantity Generators
- MANIFEST – Hazardous Waste Manifest Data

File review results are summarized in Section VI. Justification for not completing a file review, if applicable, is provided above.

Surrounding Area Regulatory Status

The following table provides a summary of those database listing that the environmental professional has identified as potentially upgradient. Downgradient and/or side gradient listing are also included if the environmental professional has determined that the nature of the listing (e.g., Superfund site, chlorinated solvent release, landfill, etc.) should be evaluated for their potential to impact the Property.

Table 2

Name	Address	ASTM Listing(s)	Distance & Direction From Property	Comments	Do issues related to the listing indicate the potential for impacts to soil, groundwater or vapor at the Property?
Washington County Sanitary Landfill	4029 Jamaca Ave N	WIMN, SRS, SWF/LF, INST CONTROL, SHWS, LCP, NPDES, ROD, US ENG CONTROLS, DELISTED NPL, CDC HAZDAT, SEMS, MN LS, MN DEL PLP, FINANCIAL ASSURANNCE	Approximately 0.5 mi. NW, Upgradient	Potential contributor to the East Metro PFAS impacts.	Yes, potential for contributing PFAS impacts to area groundwater (Ref. 5f).

Name	Address	ASTM Listing(s)	Distance & Direction From Property	Comments	Do issues related to the listing indicate the potential for impacts to soil, groundwater or vapor at the Property?
Oakdale Dump	N Hadley Ave & N Granada Ave, Oakdale, MN	NPL, SEMS, US ENG CONTROLS, ROD, PRP, ICIS	0.69 mi. W, Sidegradient	Potential contributor to the East Metro PFAS impacts.	Yes, potential for contributing PFAS impacts to area groundwater (Ref. 5f).
3M Company Residence	7990 40 th St. N, Oakdale, MN	WIMN	0.307 mi. NW, Upgradient	Inactive hazardous waste permit.	No, no evidence of potential for impacts to the Property.
McDonald's Oakdale	Unknown	WIMN	0.182 mi. WSW, Sidegradient	Inactive Construction stormwater permit	No, no evidence of a release or potential impacts to the Property.
Carlson Residence	8251 Deer Pond Ct. N, Lake Elmo, MN	LUST, SRS, VAPOR, WIMN	0.44 mi. N, Upgradient	LUST, SRS, and VAPOR listing related to a fuel oil release. No groundwater contamination reported, and the LUST was closed in March 2018	No, no groundwater contamination reported from the LUST site. Release is located greater than 250 feet from Property.
Slumberland Inc.	1 Imitation Place, Oakdale, MN	MANIFEST, WIMN	0.45 mi. W, Sidegradient	Hazardous waste generator and industrial stormwater permit.	No, no evidence of potential for impacts to the Property.

Tribal Sites

As part of the EDR Report, locations of Native American reservations equal to or greater than 640 acres in size within the search area are reported. No reservations meeting this size criterion were identified within 1 mile of the Property (Ref. 3a) The local government official was not aware of any Native American reservations within one mile of the Property (Ref. 4c).

Orphan Site Summary

None identified (Ref. 3a).

VI. Report and File Review Summary

Previous Environmental Investigations/Remedial Actions of the Property

Relevant portions of previous investigation reports completed for the Property are reproduced in Appendix E. The following table gives a general summary of the each known previous investigation's scope, conclusions, and recommendations. Each investigation is described according to its specific reference number, as denoted in the Information Resources section of the Assessment report.

Ref. #	Investigation Summary	Findings
5c	A Draft Phase I ESA was completed in 2008 by Natural Resources Group, Inc. for a portion of the Property. No figures were included to confirm the portion of the Property included in the ESA.	No RECs identified. Possible historical use of agricultural chemicals at the Site constitutes a de minimis condition.

Property File Review Summary

The Property was not identified in a standard database; no file review was completed.

Property Historical Releases

No chemical or petroleum releases were reported for the Property. No remedial actions or environmental violations have occurred on the Property (Ref. 4b).

Environmental Liens

No environmental liens were identified for the Property (Ref. 4b).

Activity Use Limitations

No institutional or engineering controls were identified for the Property (Ref. 4b). MDH has outlined a special well construction area to reduce exposure risk for PFAS in groundwater (Ref. 5f).

Proceedings Involving the Property

No pending, threatened, or past litigation, administrative proceedings, or government notices relevant to hazardous substances or petroleum products were identified (Ref. 4b).

Adjoining Property File Review Summary

Relevant portions of the regulatory file reviewed for the adjoining properties are reproduced in Appendix E. The following table gives a general summary from each regulatory file reviewed.

Ref. #	Adjoining Property Name and Direction	ASTM Listing	File Review Summary
5d	Oakdale Animal Hospital, East Adjoining, Downgradient	LUST Site #19750	Two steel fuel oil tanks were identified on the Property. A Limited Phase II Investigation was conducted to identify groundwater, soil, and vapor impact extents. Soil impacts were delineated, primarily isolated to the area around the south tank, extending 8-21 feet below ground surface. Perched groundwater DRO impacts were observed in the vicinity of the south tank; permanent groundwater, located approximately 20 feet below the soil impacts, was not sampled. The soil vapor sample concentrations did not exceed the 10X Intrusion Screening Levels. Soil and groundwater contamination was delineated and confined to the property. The leak site was closed in December 2015.

VII. Property and Nearby Property Land-Use History

Property Land-use History

Original Property development (year/use): Records show that the Property was developed for agriculture since at least 1936 (Ref. 1a).

Chronology of Past Property use/ownership: The Property has been owned by 3M since 1966.

Historical Property Structures

There were no historic structures identified on the Property (Ref. 1a).

Demolition Debris: Not applicable.

Current Property Structures, Renovations, and Additions

No structures are present on the Property (Refs. 1a, 5b).

Renovation Debris: Not applicable.

Building Additions: Not applicable.

Nearby Property Land-Use History

North	Historical Use:	Agricultural (Ref. 1a)
	Current Use:	Residential (Ref. 5b)
South	Historical Use:	Agricultural (Ref. 1a)
	Current Use:	Residential, vacant parcel (Ref. 5b)

East	Historical Use:	Agricultural (Ref. 1a)
	Current Use:	Residential, commercial (Advanced Auto Transport, Inc., Animal Inn pet Resort & Spa, Integrated Life Counseling Center; Ref. 5b)
West	Historical Use:	Idea Avenue N, agricultural (Ref. 1a)
	Current Use:	Ideal Avenue N, residential, commercial, agricultural (Ref. 5b)

General type of current or past uses in the surrounding areas: The surrounding area has been used for agricultural purposes since at least 1936. Residences were developed to the north of the Property in the early 1950s, to the west and southeast in the early 1960s, and to the south in the late 1990s (Ref. 1a).

Historical releases associated with adjacent properties or communities: Nearby Superfund sites are being assessed as potential contributing factors to the area wide PFAS contamination, including the Washington County Landfill, located northeast of the Property, and the Oakdale Dump site, located west of the Property. The state has on-going investigations and remedial actions to address the groundwater impacts in the East Metro Area (Ref. 5g). MDH has outlined a special well construction area to reduce exposure risk for PFAS in groundwater (Ref. 5f).

VIII. Site Reconnaissance

The objective of the site reconnaissance is to obtain information indicating the likelihood of identifying recognized environmental conditions in connection with the property (ASTM 1527-13 Sec 9.1). Existing Property features are shown in the Property layout on Figure 2. Photographs obtained during the Property inspection are in Appendix B.

Date of inspection: April 29, 2019

Name of individual conducting site visit: Emily Cook, Barr Engineering Co.

Weather information: 45 degrees Fahrenheit, cloudy

Interior Observations

No structures present on the Property.

Features of Current Property Structure(s)

No structures present on the Property.

Unoccupied occupant spaces: No unoccupied occupant spaces on the Property.

Exterior Observations

Methodology used to observe the Property: The Property was observed on foot. Due to the large area of the Property, representative areas of the Property were observed.

Access to the Property (vehicular access and restrictions to public access): Access to the Property was from public roads.

Periphery of the Property (roads, streets, and parking facilities, etc.): The Property is bordered to the north by residential properties, to the east by residential and commercial properties, to the south by a railroad and a vacant property, and to the east by Ideal Avenue and residential, commercial, and agricultural use.

Ground surface cover (paved, gravel, grass): The ground surface cover at the Property is primarily agricultural fields with residual crop coverage. There are wooded and grassy areas along the perimeter of the fields.

Visible evidence of filling, excavation, or burned areas: A small berm was observed at the drainage ditch in the northern portion of the Property. Small piles of burned debris were observed in the wooded area in the NE corner of the Property.

Visible evidence of vegetative stress: None observed.

Pits, ponds, lagoons, and standing surface water: A pond is located on the east edge of the Property, immediately north of the railroad. Standing water was observed behind the berm and in the drainage ditch in the northern portion of the Property. A stormwater pond is located at the entrance of the Public Works access road.

Stained soil or pavement: None observed.

Wastewater, stormwater, and other visible liquid discharge points into a pipe, pond, ditch, stream adjoining property or the Property: Stormwater discharge was observed from the culvert located at the west edge of the Property near the Public Works access road into the drainage ditch.

Indications of past uses of the Property likely to involve the use, treatment, storage, disposal or generation of hazardous substances or petroleum products: None observed.

Nonpotable/process wells: None observed.

Pipelines across or into Property: A gas pipeline runs through the Property along Ideal Avenue at the west Property boundary. Markers, pipeline access points, and above ground pipeline features were observed. A petroleum pipeline runs through the Property from the NE corner to the SE corner of the Property. Pipeline markers were observed at multiple locations on the Property.

Rail lines: A rail line runs east-west through the Property

Transformers: A transformer tower was observed in the northern portion of the Property.

Outdoor Chemical Storage Areas/Drums: None observed.

Underground Utility Locations: Underground utilities, including gas, fiber optic and electric, are generally located on the west edge of the parcel, along Ideal Ave. Water utilities and a hydrant are located on the south side of 34th St, across from Public Works.

Odors: None observed.

Evidence of Use, Production or Disposal of Controlled Substances (as defined by 21 CFR Part 802): None observed.

VIII. Interior and Exterior USTs and ASTs

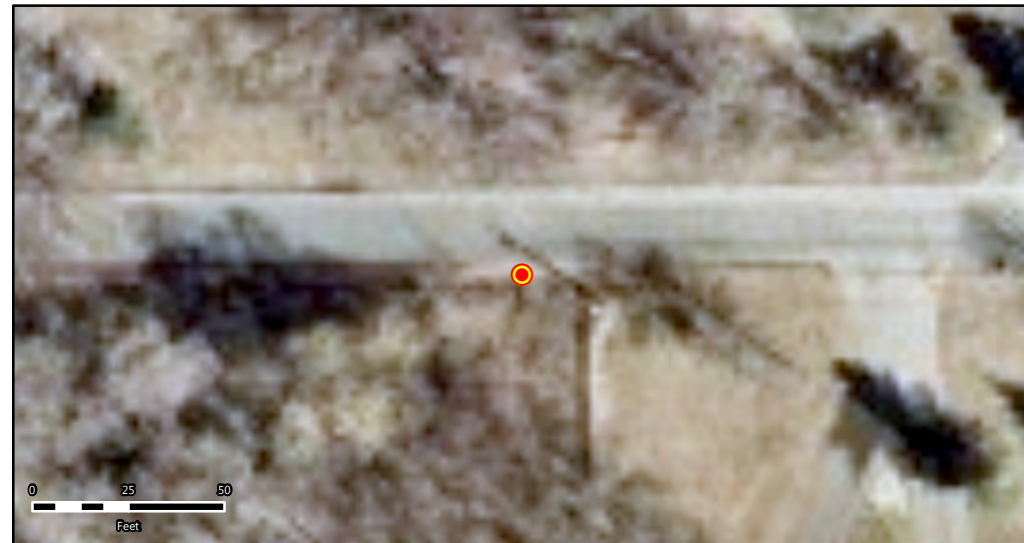
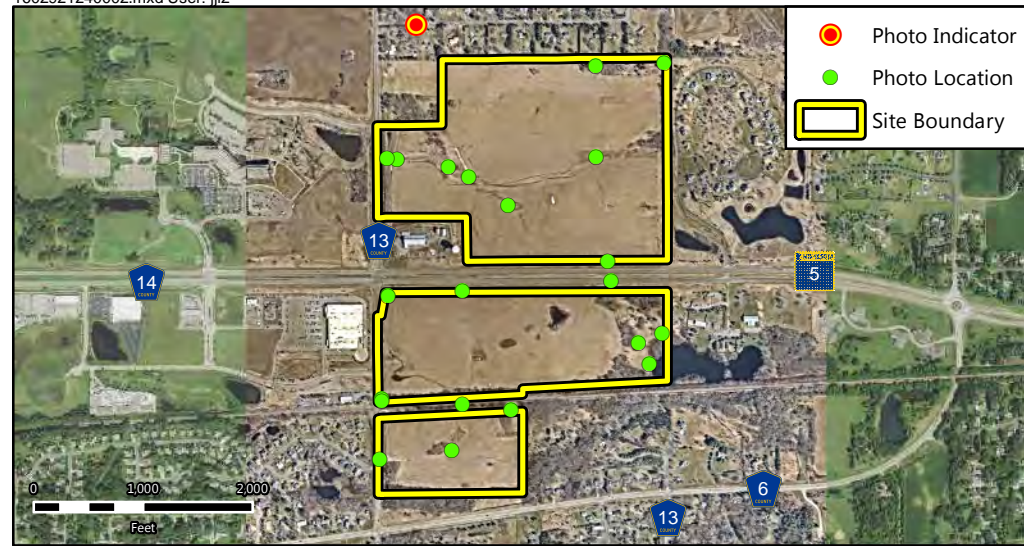
None observed.

IX. Interviews

The objective of interviews is to obtain information indicating recognized environmental condition in connection with the property (ASTM 1527-13 Sec 10.1). Especially relevant information from the interviews (Refs. 4a, 4b, 4c) is included and documented throughout the Assessment report and Appendix A.

Appendix B

Property Inspection Photographs

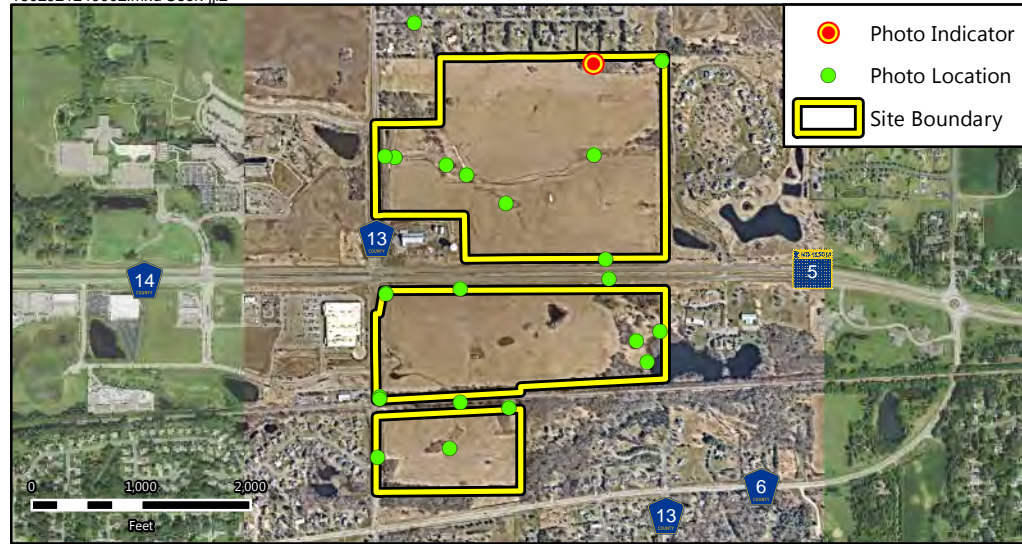


Map 1 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Petroleum pipeline markers to
the north of property on residential street



Imagery: NearMap (April 19, 2019)

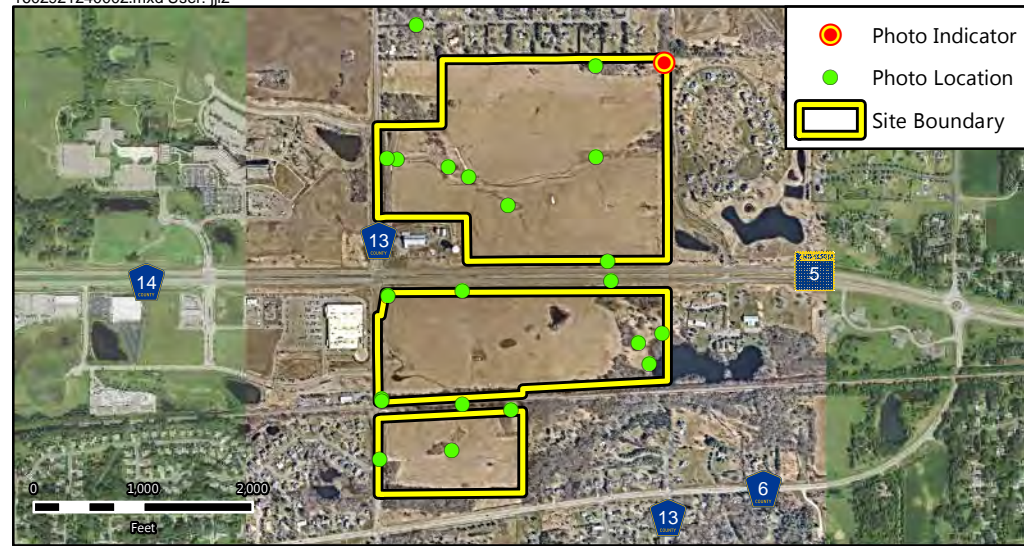


Map 2 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: NE edge of property, wooded
area, debris, small piles of burned material



Imagery: NearMap (April 19, 2019)

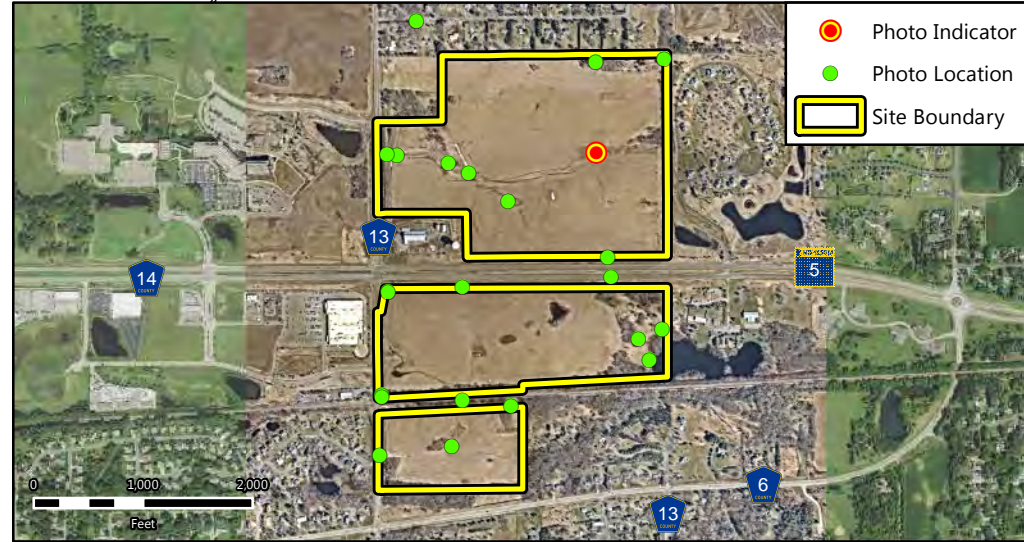


Map 3 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: NE corner of property, wooded
area, cinder block pile, wood debris



Imagery: NearMap (April 19, 2019)

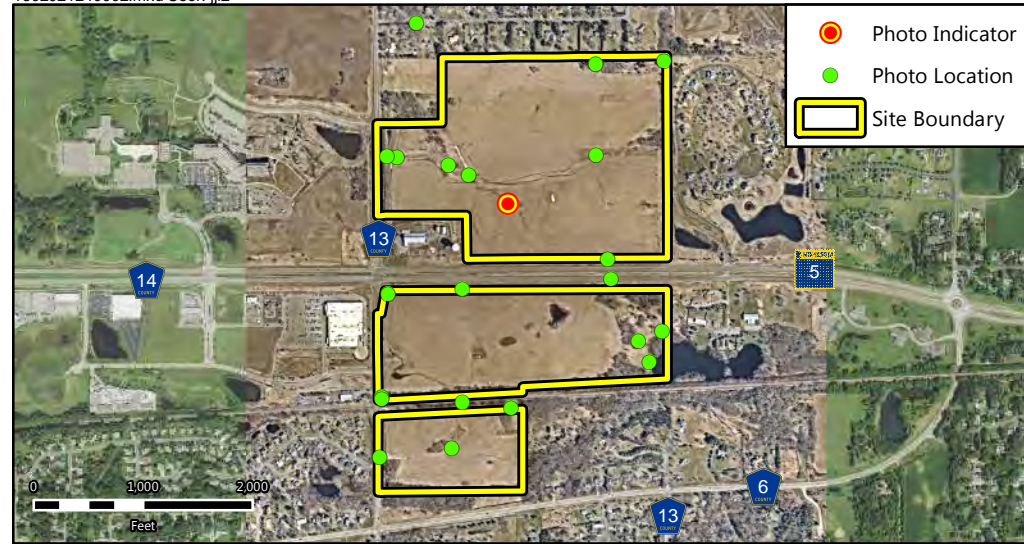


Map 4 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Debris

N

Imagery: NearMap (April 19, 2019)

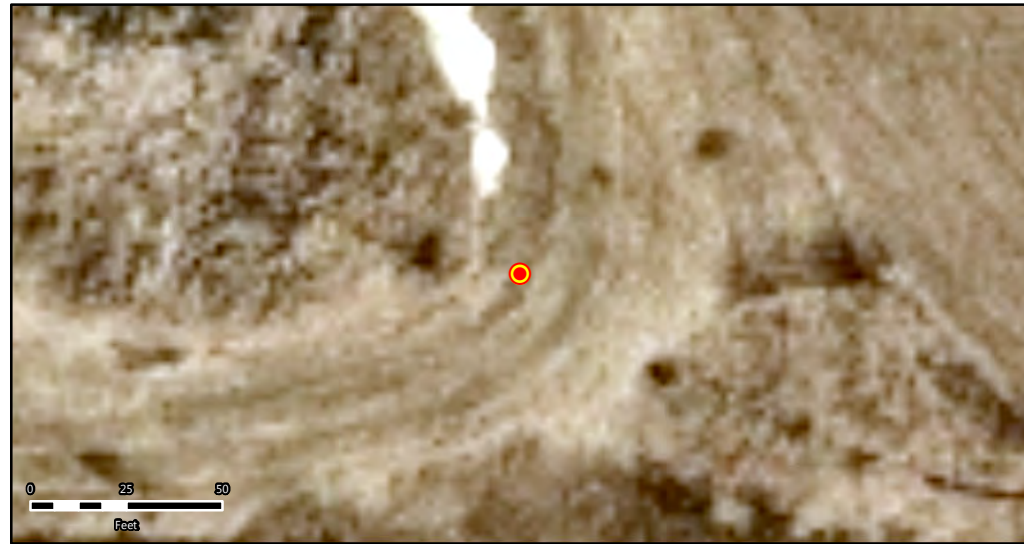
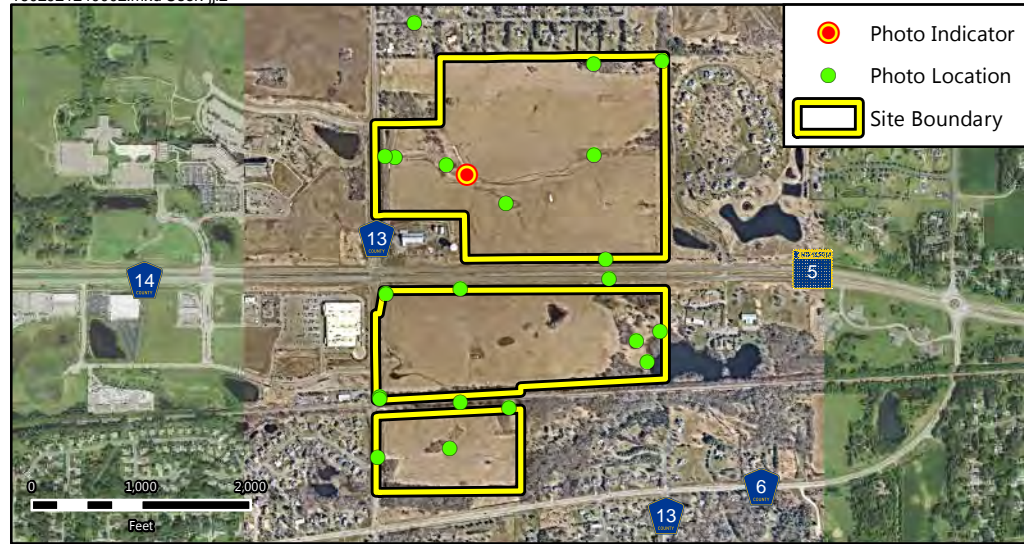


Map 5 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Transmission tower, overhead lines run to the south and to the east, debris at base (planting pots, empty paint can, fry cooker)



Imagery: NearMap (April 19, 2019)

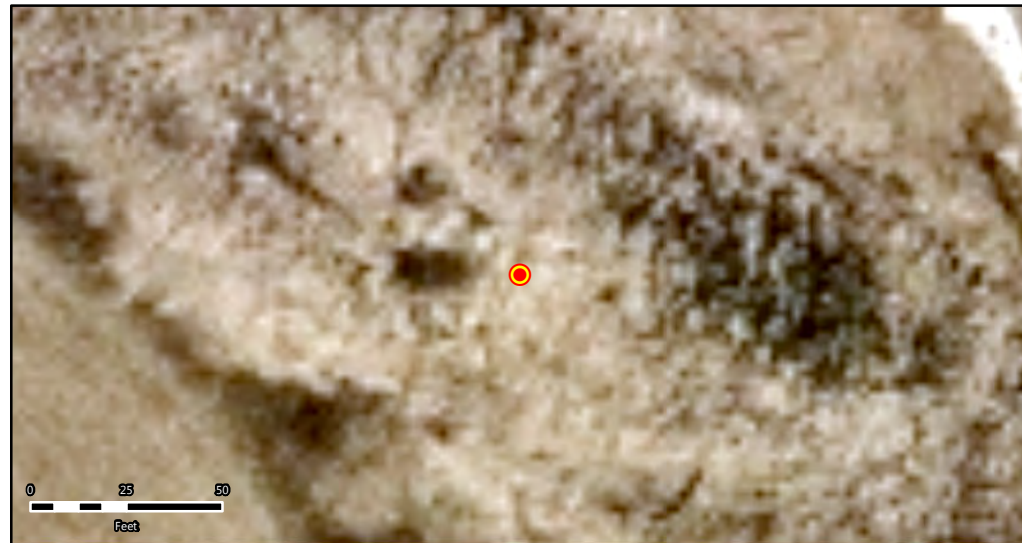
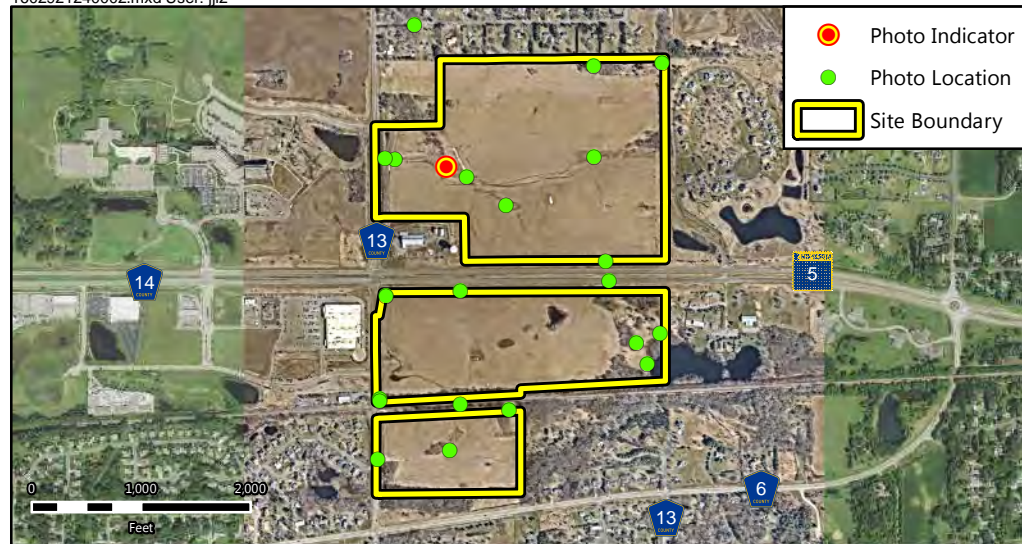


Map 6 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Culvert, drainage ditch flowing east



Imagery: NearMap (April 19, 2019)

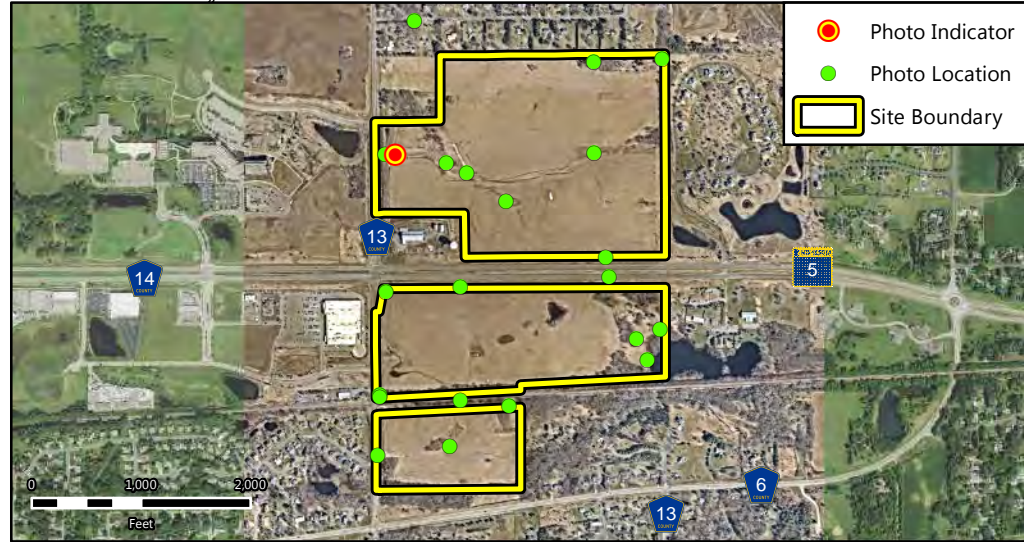


Map 7 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Low spot/ swamp, surrounded
by berm



Imagery: NearMap (April 19, 2019)

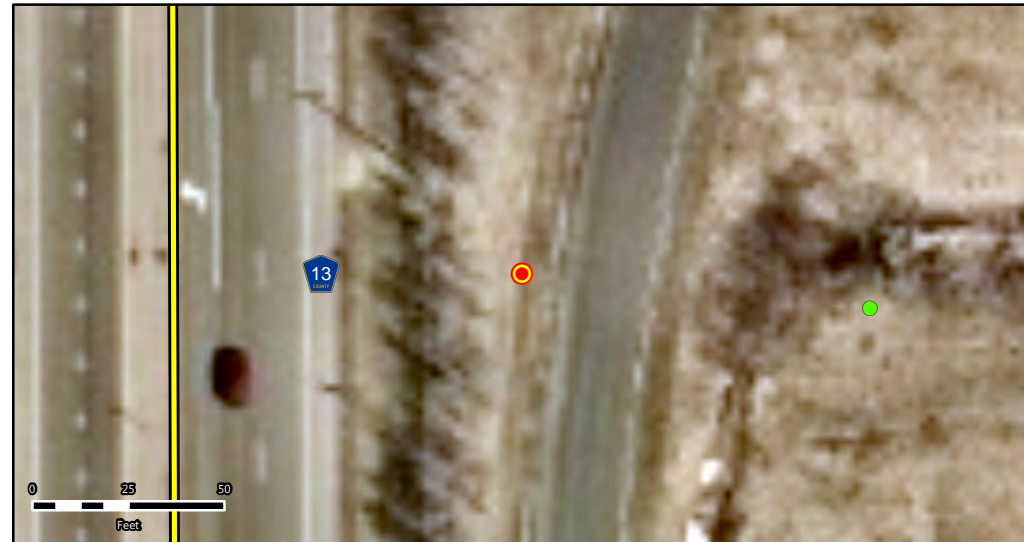
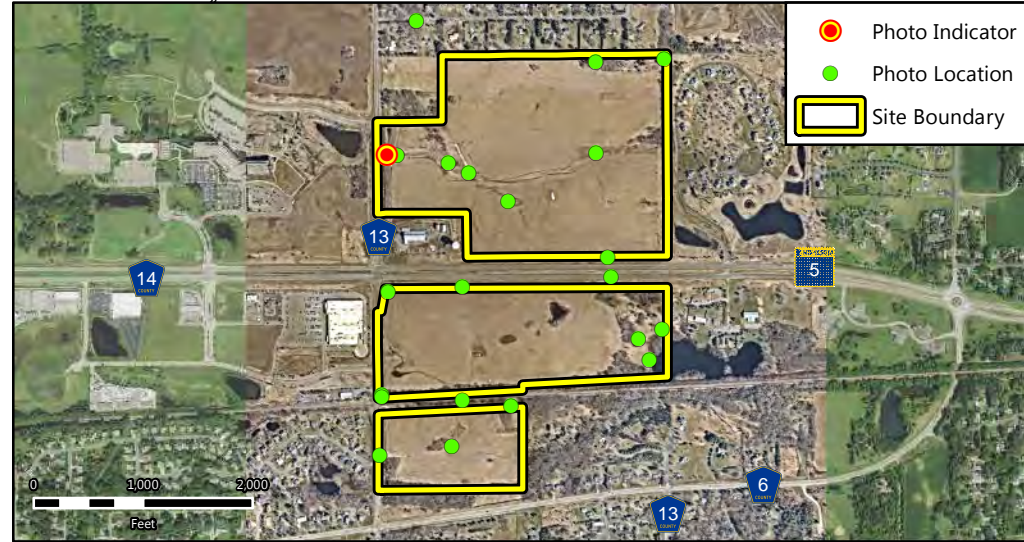


Map 8 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Culvert, drainage ditch



Imagery: NearMap (April 19, 2019)

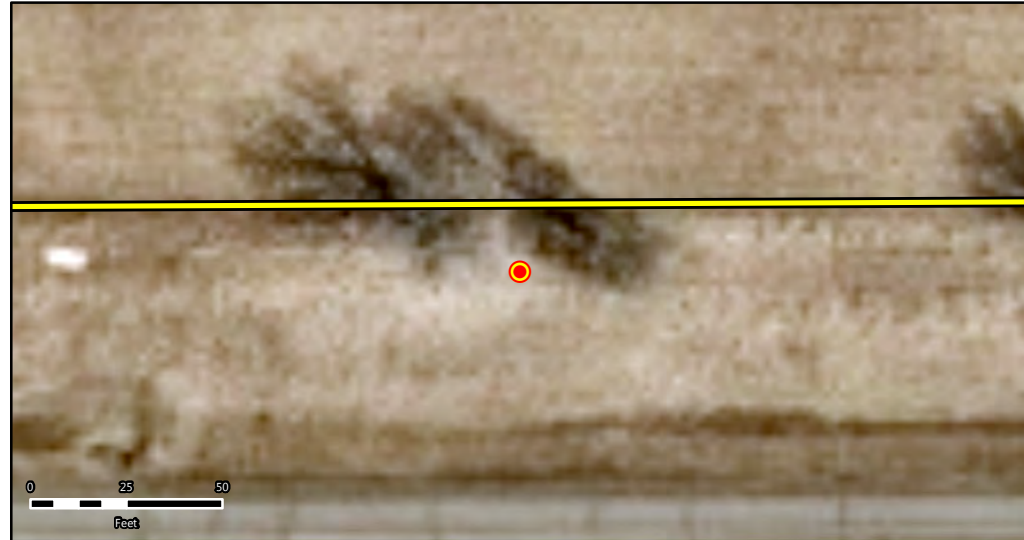
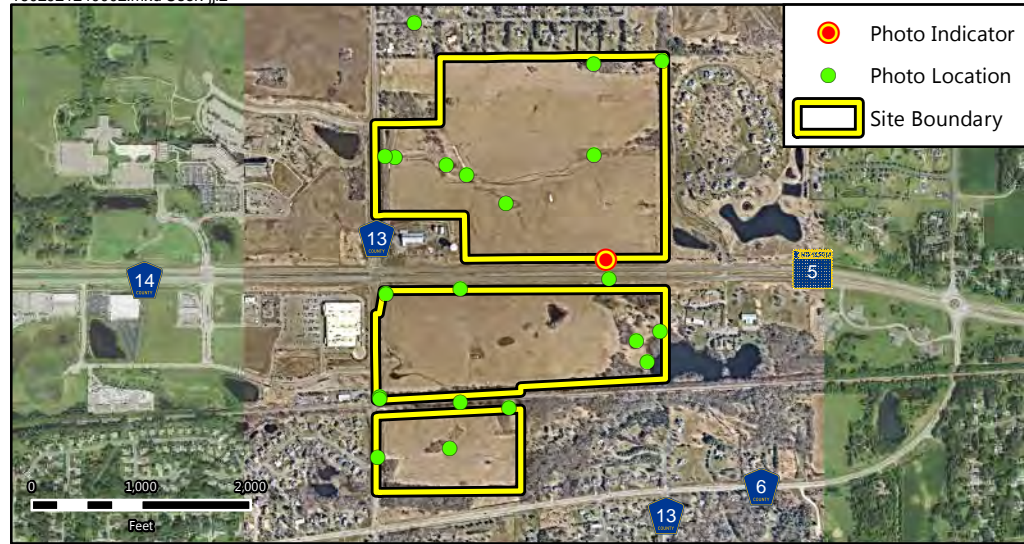


Map 9 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Utilities along Ideal Ave and public works roadway (gas pipeline flags, fiber optics marker, electrical, sanitary sewer)



Imagery: NearMap (April 19, 2019)

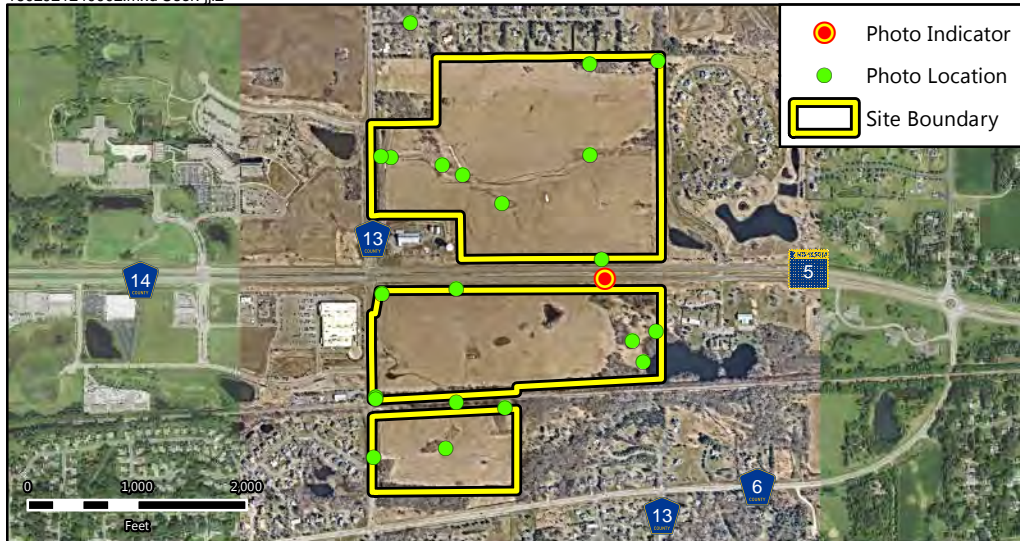


Map 10 of 22
PROPERTY INSPECTION PHOTOGRAPHS
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Petroleum pipeline markers near property boundary, north of 34th

N

Imagery: NearMap (April 19, 2019)

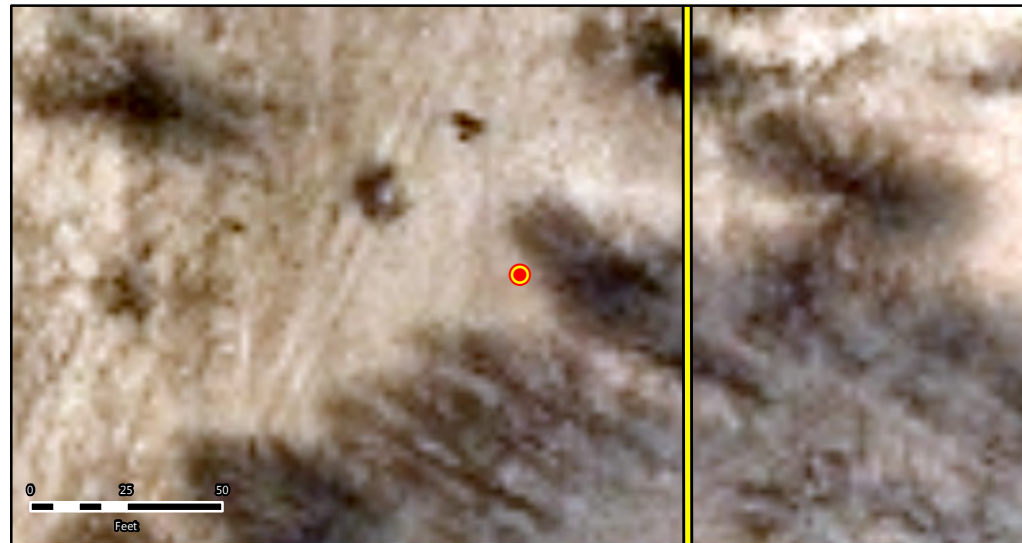
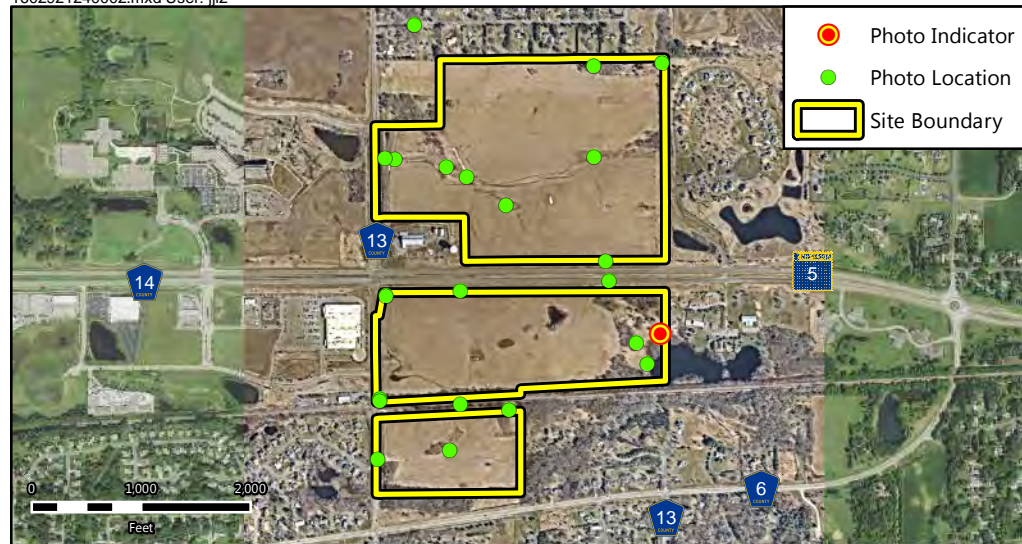


Map 11 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Petroleum pipeline markers
near property boundary, south of 34th



Imagery: NearMap (April 19, 2019)

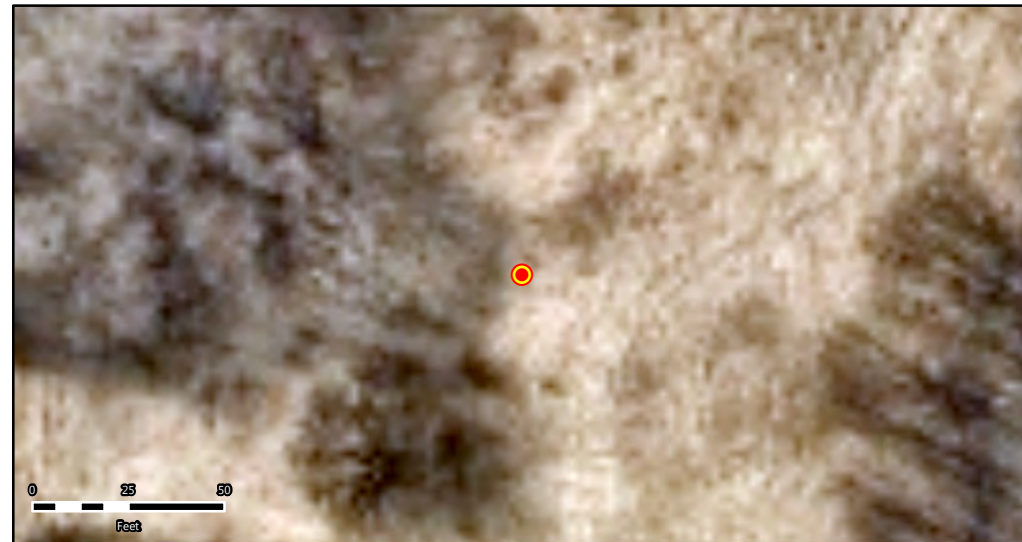
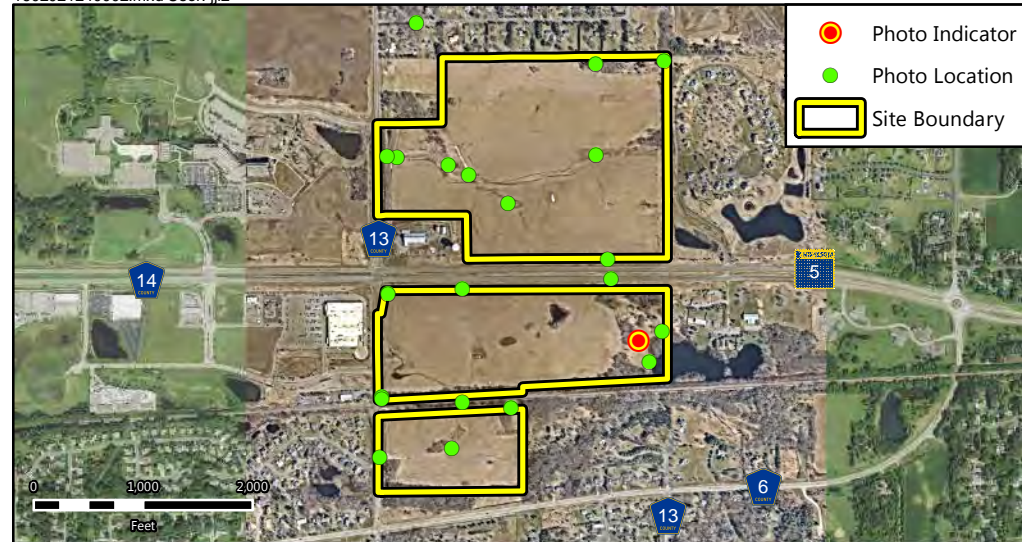


Map 12 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Wood and debris pile on east
property edge



Imagery: NearMap (April 19, 2019)

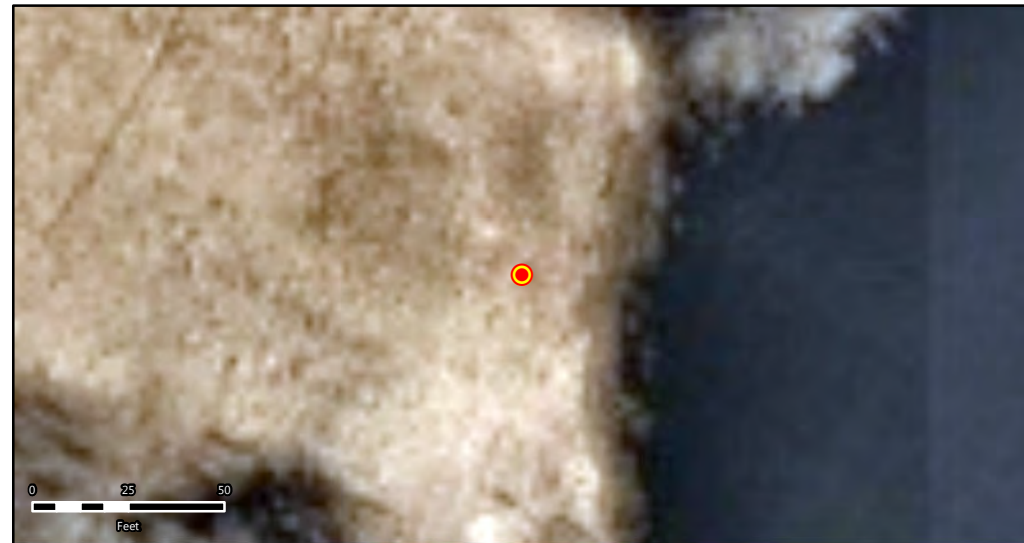
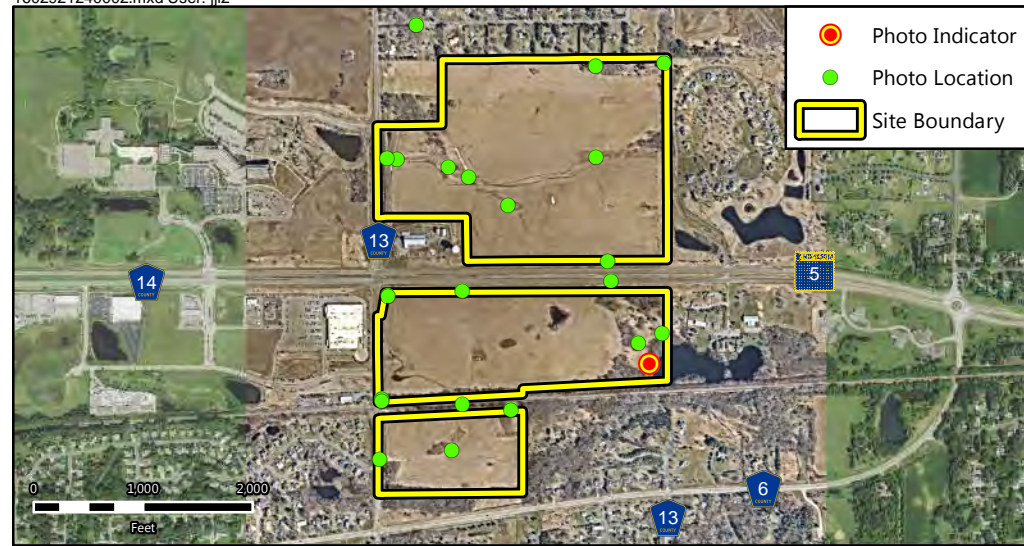


Map 13 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Petroleum pipeline marker



Imagery: NearMap (April 19, 2019)

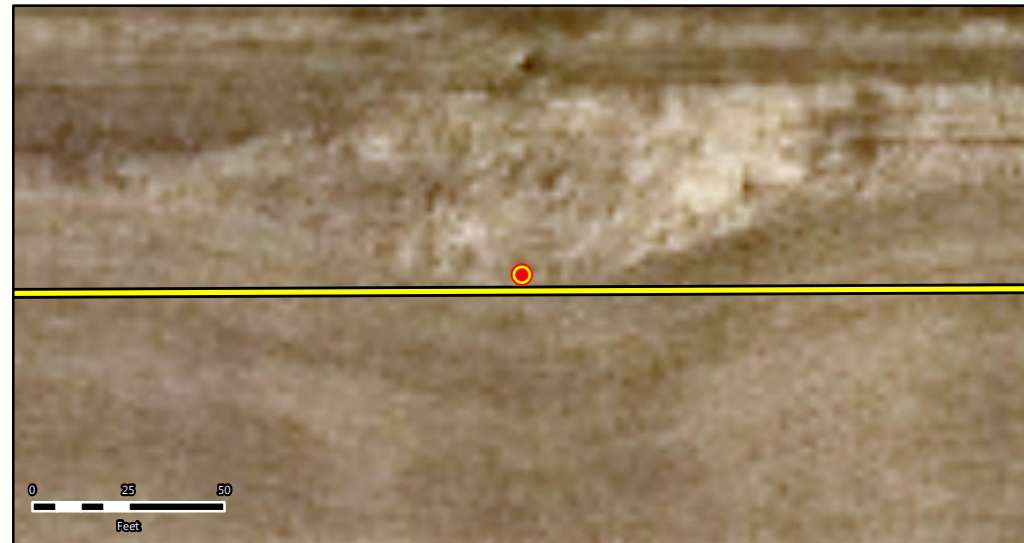
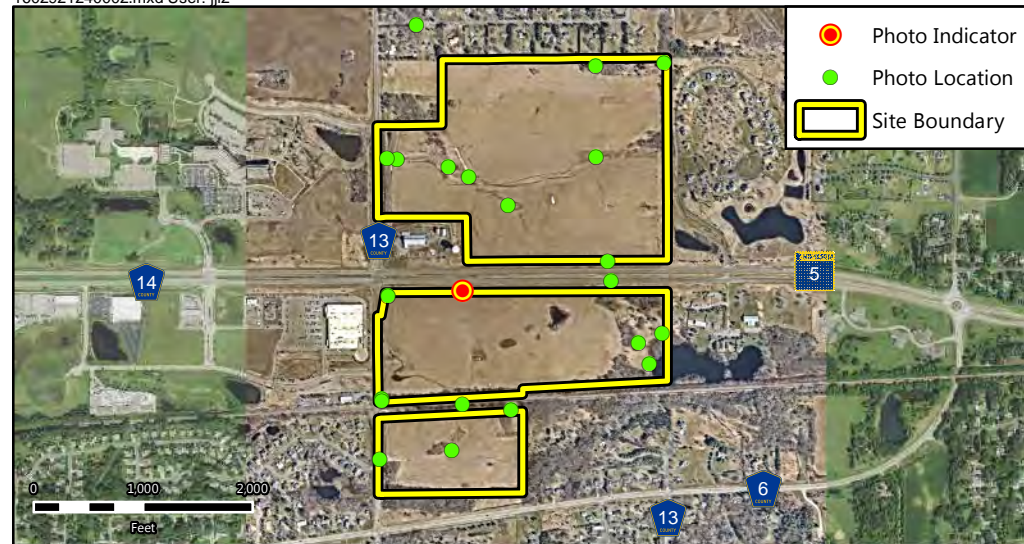


Map 14 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Low spot, ponded water,
petroleum pipeline continues to railroad
to the south



Imagery: NearMap (April 19, 2019)

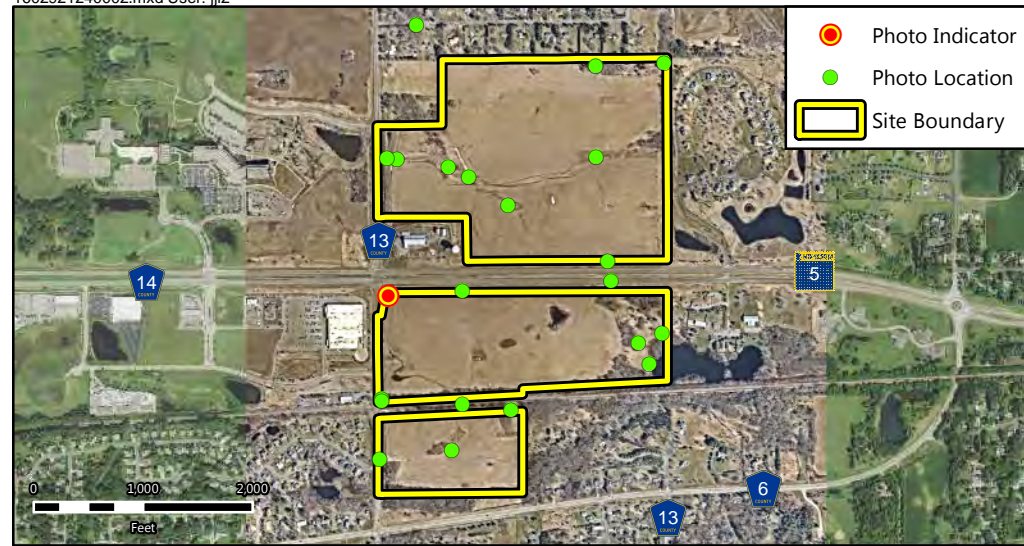


Map 15 of 22
PROPERTY INSPECTION PHOTOGRAPHS
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Water utility, hydrant and gate valve markers near property boundary along 34th

N

Imagery: NearMap (April 19, 2019)

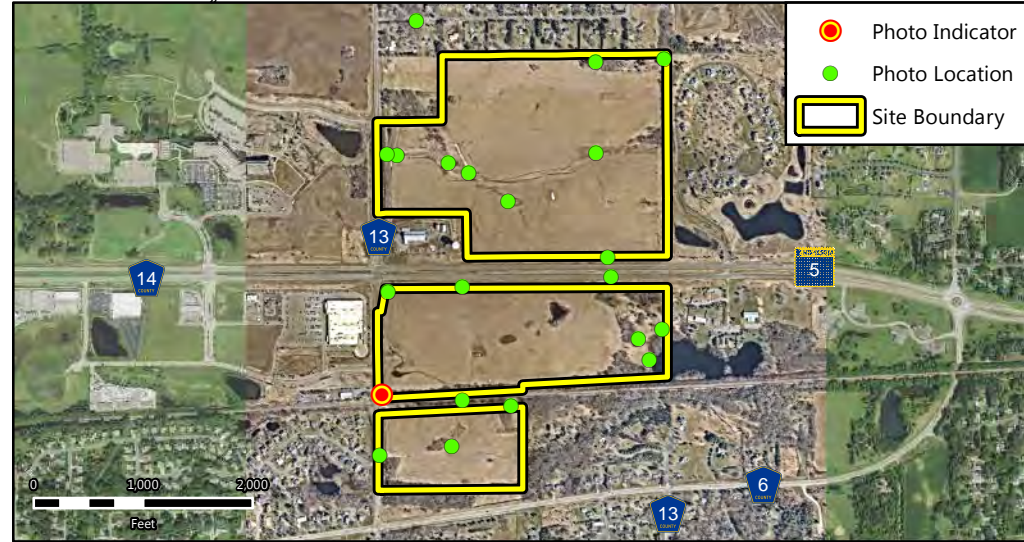


Map 16 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Property at corner of Ideal Ave
and 34th, views south and east, typical
agricultural use on property



Imagery: NearMap (April 19, 2019)

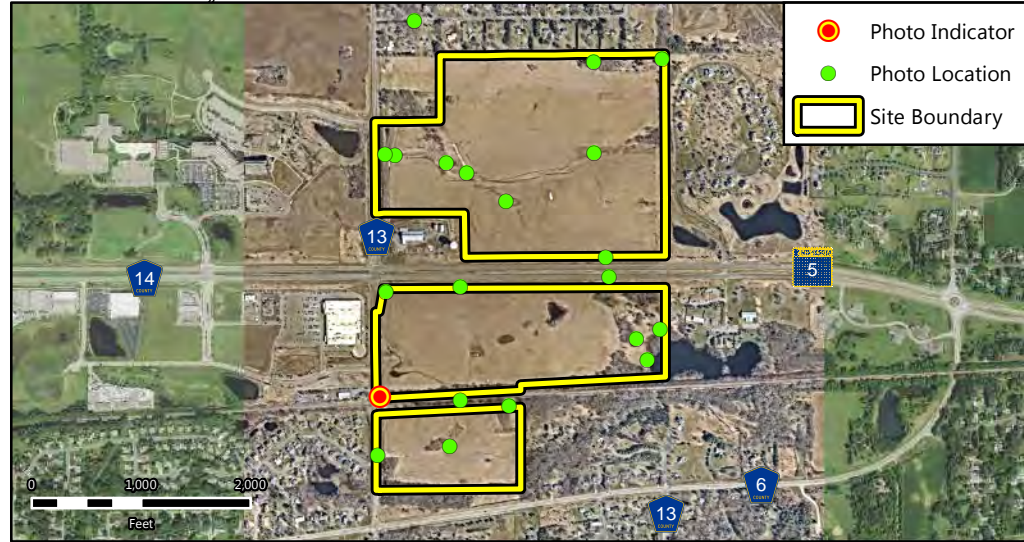


Map 17 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Gas pipeline above ground
equipment



Imagery: NearMap (April 19, 2019)

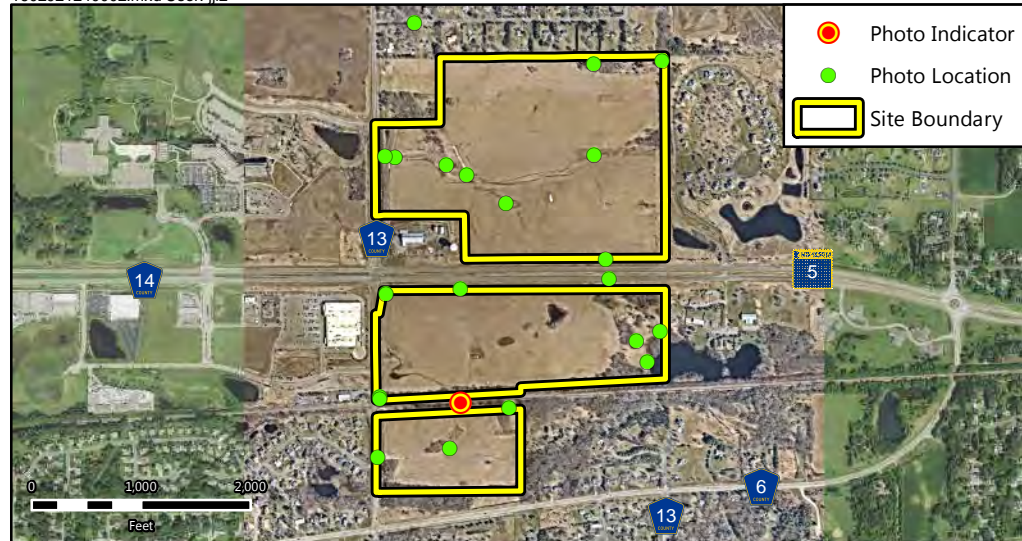


Map 18 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Railroad and above ground
equipment between south and middle
sections of property



Imagery: NearMap (April 19, 2019)

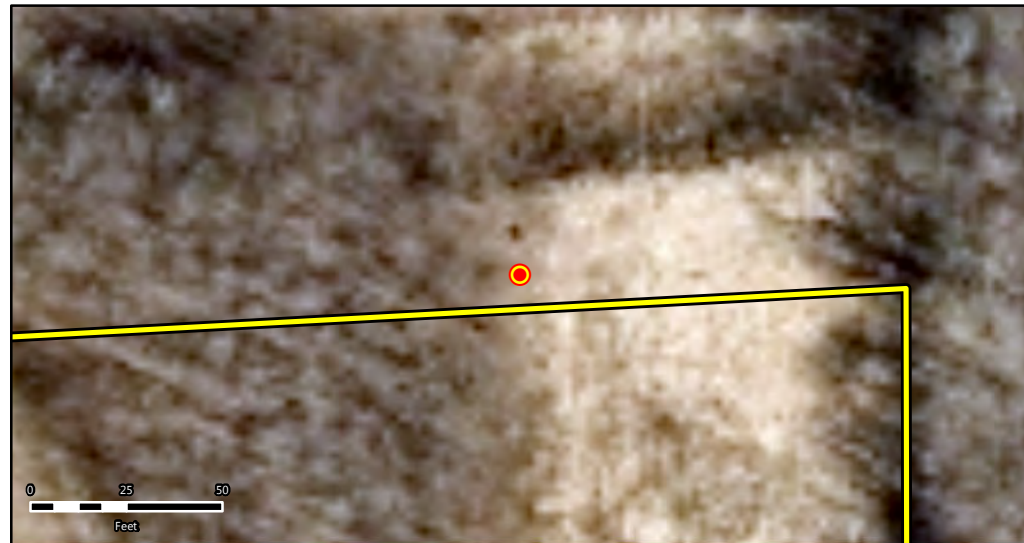
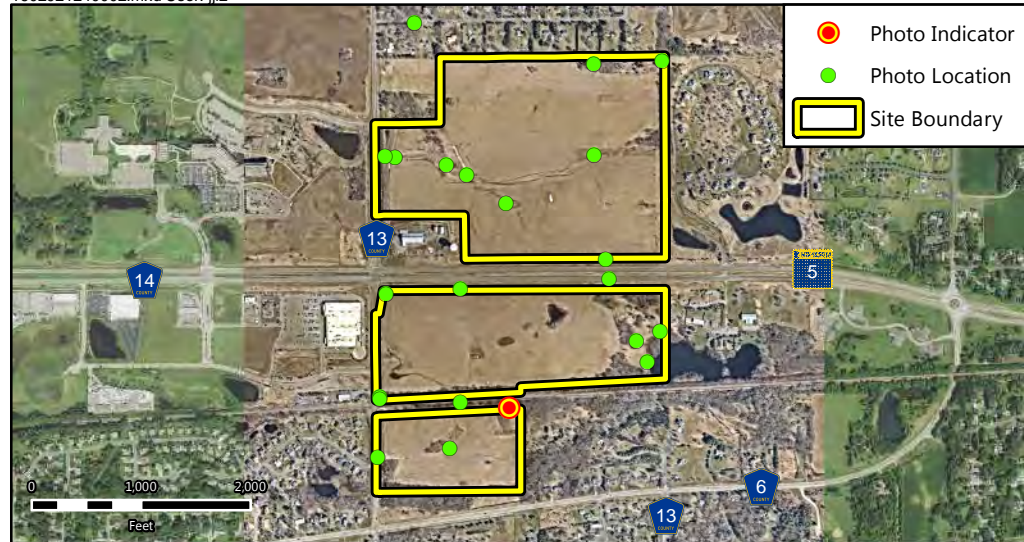


Map 19 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Railroad tracks through
property, tracks run east-west



Imagery: NearMap (April 19, 2019)

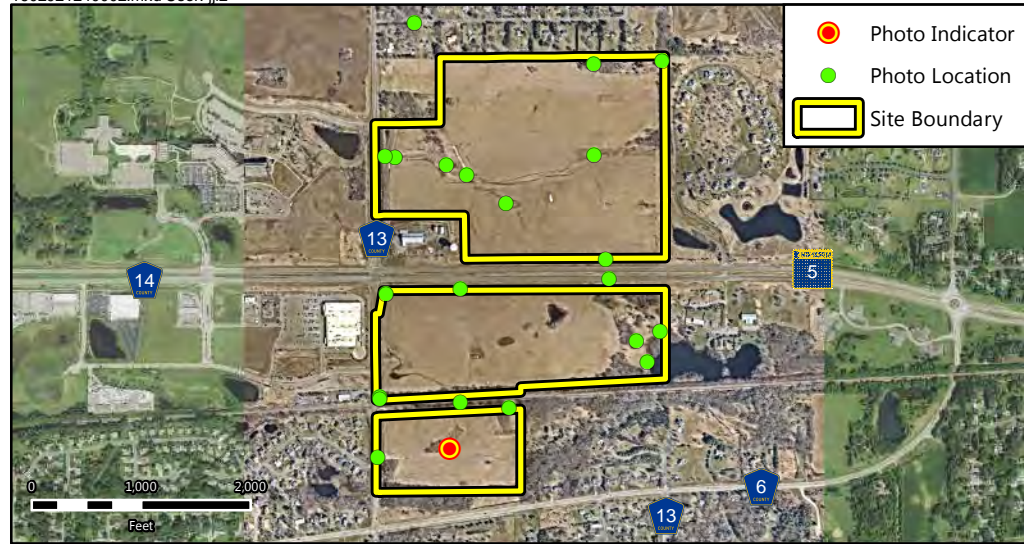


Map 20 of 22
PROPERTY INSPECTION PHOTOGRAPHS
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Watering tank

N

Imagery: NearMap (April 19, 2019)

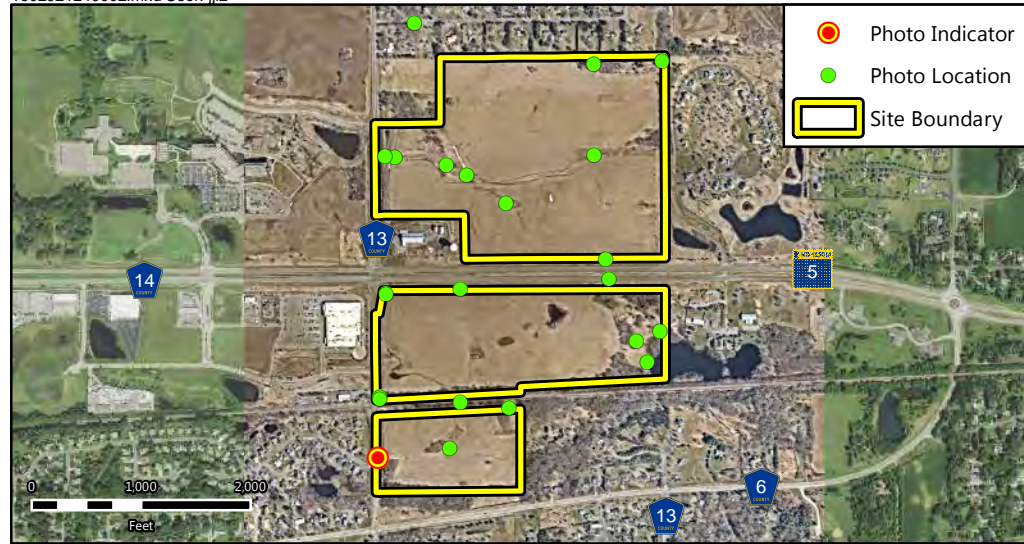


Map 21 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Hunting blind and feeders in field



Imagery: NearMap (April 19, 2019)



Map 22 of 22
**PROPERTY INSPECTION
PHOTOGRAPHS**
Parcel ID 1602921240002
Lake Elmo, MN

Date: 4/29/2019
Comment: Gas pipeline access



Imagery: NearMap (April 19, 2019)