MILESTONE
MATERIALS
A Division of Mathy Construction Co.

December 9, 2024

Dale Beers, Zoning Administrator
Washburn County Zoning Department
10 4th Avenue
P.O. Box 506
Shell Lake, WI 54871

RE: Conditional Use Permit Application (Amended), Milestone Materials – Lakken Ridge

Dear Mr. Beers:

Please find enclosed an amended conditional use permit application for nonmetallic mining operations. Milestone Materials proposes to establish a sand and gravel nonmetallic mining operation (gravel pit) on property Tax ID# 17800. An application was submitted (electronically) on December 3, 2024; a hard copy was placed in the mail this day as well. This amended application is being provided to identify an updated use size (acres) for the proposed use based on current zoning of the parcel, Tax ID# 17800.

The amended application includes updated supporting information including a narrative of ordinance application requirements and an operations plan. The Washburn County Zoning Application for a Conditional Use Permit (form) was included in the original application packet, and has not been updated; please utilize that original as previously provided. Further, the required fee ($250) was included in the original application packet that was mailed to your office.

Thank you Dale, please let me know if you have any questions or need any additional information. The best way to reach me is at: 715-450-5479 or by email at: jeff.johnson@almholding.com.

Sincerely,

Jeff Johnson, PE
Northern WI Environmental Manager, ALM Holding Company

Application # _____

Washburn County Zoning
Application for a Conditional Use Permit
(May be used to amend a condition of a previously issued permit)

You must contact your Town Clerk and attend your local Town meeting to present your proposed plans to the Town Board prior to the County Zoning Committee Public Hearing. Failure to do so could result in delay or denial of your request. The Zoning Committee will request input from the Town. **The Town will not schedule you for their meeting until they have received your paperwork from the Zoning Office. When you contact the Town, verify that your paperwork has been received.**

Date of application 12-3-2024 Non-refundable fee payable to: **Washburn County Zoning $ 250.00**
Mail To: **PO BOX 506, Shell Lake WI 54871**

Property owner Scott Frolik Phone # (715) 296-8116

Mailing address 2463 12 3/4 Ave, Cameron, WI 54822-8725

Property legal description SE NE DOC# 407290 WD Sect. 33 Town 37N Range 11W

Town of Long Lake Site Address: N329 Lakken Rd, Sarona, WI

Lot size 40 ac Tax ID# 17800 Zoning district AG

Zoning ordinance interpretation Nonmetallic mines (gravel pits) allowed as conditional use within AG District

For what use or activity are you applying? Extraction and processing of sand and gravel (non-metallic mining)

Reason for request Provide mineral resources to support local road and other construction projects

Existing property improvements Home and accessory structures

Proposed property Improvements Refer to mine plan and reclamation plan (end land use)

Please note:
If you are placing a mobile home, what is the size? N/A Year? * N/A
*You must provide pictures of the mobile home and documentation that the mobile home was manufactured after June 15, 1976. If your mobile home was manufactured prior to that date, you must obtain a variance from the Washburn County Board of Adjustments **before** applying for this Conditional Use Permit.

Approval of this Conditional Use Permit does not eliminate the need to obtain a land–use permit from the Zoning Office and any applicable State or Town permits.

I agree to permit County officials charged with administering County Ordinances, or other authorized persons, including the assessor, to have access to the above-described premises at any reasonable time for the purpose of inspection.

(Applicant or representative print name) ANTHONY TOMASHEK AGENT FOR OWNER

(Applicant or representative signature) (Date signed) 12-3-2024

920 10th AVE. NORTH
ONALASKA, WI 54650
(Mailing address if different than above)

You must complete the attached plot plan

Office use

Dates published _____ Hearing date _____

Application amended062221

Decision of the Zoning Committee
Washburn County, Wisconsin

Findings of Fact

Having heard the testimony and considered the evidence presented, the Committee finds the application to be **(Correct / Incorrect).**

Conclusions of Law

Based on the above findings of fact, the Committee concludes that:

CONDITIONAL USE – The application for a conditional use permit **Does / Does Not** * qualify under the following criteria of Section 38-522 of the Washburn County Zoning Ordinance:

1) The location, nature, and size of the proposed use.
2) The size of the site in relation to the proposed use.
3) The location of the site with respect to existing or future roads giving access to it.
4) Its compatibility with existing uses on land adjacent thereto.
5) Its compatibility with the immediate and surrounding environment and the possibility for reclamation, if needed.
6) Its impact upon and harmony with the future environment and the future development of the district.
7) Existing topographic and drainage features and vegetative cover.
8) Its relationship to the public interest, the purpose and intent of this article, and substantial justice to all parties concerned.

*Explanation of criteria if "does not" is circled:

_____
_____
_____
_____

Order and Determination

On the basis of the above findings of fact, conclusions of law, and the record in this matter, the Committee orders:

CONDITIONAL USE: The request for a conditional use is **Denied / Granted / Granted in Part** subject to the following conditions _____
_____
_____
_____

___Administrative review in ___ years ___Committee (public hearing) review in ___years

The Zoning Administrator is directed to issue a decision permit incorporating these conditions.
Any privilege granted by this decision must be exercised within one year of the date of this decision by obtaining the necessary building, zoning, and other permits for the proposed construction, if applicable. This period will be extended if an order of any court or operation of law stays this decision.

_____ _____

Zoning Committee, Chair Date

This decision may be appealed by filing an appeal with the Board of Adjustments within thirty (30) days of this decision.

PLOT PLAN

A **plot plan** must show all of the following information. Please check the box to verify that you have included each item. If the situation does not apply, write "N/A".

Show the location of:

- ☒ Well
- ☒ Septic tank, holding tank or drain field
- ☒ Existing and proposed structures with dimensions noted
- ☒ Lakes, ponds, streams, rivers, wetlands and flowages
- ☒ Driveway and turnaround (if applicable) with length and width noted
- ☒ All public roads

Show distance of any existing or proposed structure (including new additions) from:

- ☒ Ordinary high water mark of all lakes, ponds, streams, rivers, and flowages
- ☒ Wetlands
- ☒ Centerline and/or right-of-way of any public road
- ☒ Side and rear property lines
- ☒ Other structures

Plot Plan - MUST SHOW ALL OF THE ABOVE (you may use a separate sheet, 8 ½ X 11 format appreciated)

North

See Attached Figure(s)

Washburn County Zoning
PO Box 506
Shell Lake, WI 54871

November 27, 2024

RE: Letter of Authorization – Lakken Ridge property

Dear Washburn County:

I, Scott Frolik, hereby authorize Tony Tomashek, ALM Holding Company, and Mathy Construction Company, to act as agent on my behalf and apply for all required permits and any correspondence pertaining to such.

This authorization includes, but is not limited to:

* All permits required for the Lakken Ridge Pit in the Town of Long Lake, Washburn County, WI.
* Speak on my behalf at any public or other meetings related to the project.

I affirm that the authorized person has my full consent and authority to act on my behalf in all matters related to the authorization scope mentioned above.

Please contact me if you have any questions or concerns regarding this letter of authorization.

Sincerely,

Scott Frolik
2463 12 ¾ Ave.
Cameron, WI 54822
715-296-8116

CONDITIONAL USE PERMIT APPLICATION

CONDITIONAL USE PERMIT APPLICATION FOR

NONMETALLIC MINING

LAKKEN RIDGE PIT

MILESTONE MATERIALS

A DIVISION OF MATHY CONSTRUCTION COMPANY

SECTION 33, TOWN OF LONG LAKE

WASHBURN COUNTY, WISCONSIN

SUBMITTED TO:
WASHBURN COUNTY ZONING DEPARTMENT
TOWN OF LONG LAKE (COPY)

DECEMBER 2024

MILESTONE MATERIALS
A Division of Mathy Construction Co.

TABLE OF CONTENTS

LIST OF FIGURES AND DRAWINGS

LIST OF APPENDICES

1.0 Introduction & Purpose

Milestone Materials (division of Mathy Construction Company) proposes to operate a gravel pit (nonmetallic mining) within the Town of Long Lake in Washburn County. The 40 acre parcel is owned by Scott W. Frolik with parcel tax ID 17800. The purpose of this application is to obtain a conditional use permit for the operation of the gravel pit on the portion of land currently zoned agricultural (AG); no activity would occur on the portion of the parcel currently zoned RR-2. The application includes information required by Washburn County Ordinances and also incorporates other information pertinent to the Town of Long Lake Nonmetallic Mining Ordinance.

1.1 Legal Description

Tax ID# 17800: 65-026-2-37-11-33-1 04-000-001000, SE NE DOC# 407290 WD, Section 33, Township 37 N, Range 11 W. 40 acres.

2.0 Standards Applicable to All Conditional Uses

The following factors are considered for the conditional use permit application, per Sec. 38-537, Division 20. – Conditional Use Permits.

2.1 Sec. 38-537(1): The location, nature, and size of the proposed use.

The location of the site is N329 Lakken Road, Sarona, WI. The parcel, Tax ID 17800, is 40 acres in size. However, the proposed use would only occur on the portion of the parcel that is zoned AG, approximately 36 acres; no activity would occur within the portion zoned RR2. The proposed use includes the extraction of nonmetallic minerals, primarily sand and gravel (gravel pit), and processing of the minerals including stockpiling, screening, crushing, and transporting. There is no washing of aggregate proposed. Reference Figures 1 & 2 for the site location.

2.2 Sec. 38-537(2): The size of the site in relation to the proposed use.

The parcel, Tax ID 17800, is 40 acres in size, and the proposed use will utilize approximately 24 acres for the extraction of minerals. Reference Appendix B for the approximate mining extent, layout and operations plan.

2.3 Sec. 38-537(3): The location of the site with respect to existing or future roads giving access to it.

The site is located on the west side of Lakken Road. An entry (access) road will be established off of Lakken Road. Reference Figures 4 & 8 for road identification and loaded haul route.

2.4 Sec. 38-537(4): Its compatibility with existing uses on land adjacent thereto.

Land adjacent to the parcel include primarily agricultural (AG) zoned parcels, with one small section to the South zoned residential (RA), reference Figure 3. Adjacent parcel use includes nonmetallic mining, agriculture, passive recreation or forested areas, with residences existing to the northwest, north, northeast, east, and south. An existing Town of Long Lake nonmetallic mine (gravel pit) is located to the north, parcel Tax ID 17797, adjacent to this property. Nonmetallic mining is an allowable conditional use on the subject property, as with other adjacent properties zoned AG.

2.5 Sec. 38-537(5): Its compatibility with the immediate and surrounding environment and the possibility for reclamation, if needed.

The property has sufficient geologic resources (minerals) to support the operation of a gravel pit. The gravel pit operations are compatible with the immediate surrounding environment with an existing nonmetallic mine (gravel pit) adjacent to the north of this proposed site. Operations of a gravel pit would include heavy machinery similar to agricultural operations, with added truck traffic supporting transportation of the minerals off-site. The reclamation of the parcel (as mining is completed) to passive recreation or agricultural is compatible with those current existing uses on adjacent lands.

2.6 Sec. 38-537(6): Its impact upon the harmony with the future environment and the future development of the district.

Successful reclamation will support the continued development of recreational or agricultural use within the district. Also refer to interests and intent under Sec. 38-537(8) below.

2.7 Sec. 38-537(7): Existing topographic and drainage features and vegetative cover.

Reference Figures 2 & 5 for existing topography and drainage features. Existing vegetative cover includes agricultural crops, native grasses, deciduous and conifer trees.

2.8 Sec. 38-537(8): Its relationship to the public interest and the purpose and intent of this division.

Nonmetallic minerals are essential to the building and maintaining of roadway infrastructure of the surrounding community and County. Access to, and extraction of, the minerals in the immediate area is critical to the supply of aggregate used for those projects. Local sourcing of these materials decreases cost of road projects, lessens truck traffic distances, and promotes jobs and other opportunities for the community. Milestone Materials operates dozens of mine sites effectively, contributing to the general welfare, safety, health, and economy of the County and citizens.

3.0 Washburn County: Division 26 - Quarries & Nonmetallic Mining: Sec. 38-713. - Application Information

1. *A Description of all phases of the contemplated operation including types of machinery and equipment which will or might be necessary to carry on the operation.*

   A description of all the phases of the contemplated operation plan is detailed within the application. This is in section **6.0 Operation Plan**. Figures 4 - 8 refer to site features that include a scale bar on all figures indicating distances from neighboring structures, terrain, surface water features, potential wetlands, centerline and/or right-of-way of any public roads, side and rear property lines, and other structures.

2. *Topographic maps or aerial photos of the proposed site, and the area beyond the site to a minimum distance of 300 feet on all sides, and information as to the soils and other geographic features that are located within the area.*

   Topographic maps and aerial photos of the site are included within this application. These are located in the List of Figures and Drawings as attachments and supplemental guidance. The soils and other geologic features of the site information for the site is also included in the List of Appendices under Appendix A Custom Soil Resource Report, Geology, and Hydrogeology.

3. *An estimation of the quantity and type of material to be removed and its effect on the surrounding area.*

   The Lakken Ridge Pit proposes the operation and extraction of nonmetallic minerals, primarily sand and gravel (gravel pit), and processing of the minerals including stockpiling, screening, crushing, and transporting. The estimated quantity of this deposit is in the range of 1.4 million tons of marketable nonmetallic mineral materials.

4. *Where the operation is to include sand and gravel washing, the estimated daily quantity of water required, its source, and its disposal shall be identified.*

   The Lakken Ridge Pit operation does not propose any sand and gravel washing currently at this time.

5. *Where the operation is to include a hot or cold blacktop plant, a description of the type of equipment used and an estimate of use frequency.*

   The Lakken Ridge Pit operation does not propose any hot or cold blacktop plant currently at this time.

6. *An approved reclamation plan pursuant to Wis. Admin. Code ch. NR 135.*

   Separate filings will be made, as necessary, upon approval of the conditional use permit by Washburn County, including the associated reclamation plan for the Lakken Ridge Pit.

4.0 Surrounding Land Owners and Land Use

Reference Figure 3 for a zoning map showing adjoining land owners. Nonmetallic mining is an allowable conditional use on the subject property, as with other adjacent properties zoned AG.

5.0 Soil Types, Geology, Hydrogeology, and Erosion Control

Soil types have been identified using the United States Department of Agriculture – Natural Resources Conservation Service. A custom soil resource report, along with geology and hydrogeology of the area is included in Appendix A. Mineable geologic resources include sand and gravel, with a projected total reserve amount of 1.4 million tons.

Operations shall be covered under the Wisconsin Department of Natural Resources' (WDNR) Wisconsin Pollution Discharge Elimination System (WPDES) General Permit No. WI-0046515-07-1. The WDNR storm water general permit will be obtained prior to commencing any nonmetallic mining operations and after successfully obtaining the conditional use permit.

6.0 Operation Plan

6.1 Site Layout

The proposed mining phases and extent are displayed in Appendix B. Mining is proposed to occur in phases beginning in the southwest portion, moving clockwise to the north, then east, and finally south. Mining and processing equipment will be located within the exposed mine area, and moved to within each open area as mining progresses and reclamation occurs behind.

6.2 Operation Activity

The primary operation activity will be the extraction of sand and gravel and the processing of aggregate products for construction use. The typical excavation operation sequence begins with the removal of the topsoil from the top of the sand and gravel deposit using bulldozers, a backhoe and/or scrapers and haul trucks. After the sand and gravel is exposed, the sand and gravel is then excavated from the bank and hauled by end-loaders or trucks a short distance to the crushing and screening plant where the sand and gravel is crushed and sized into various products. The crushing and screening plant typically includes several crushing units, screening units, and conveyors. The crushing and screening plants utilized are portable and are moved within the excavation area and in and out of the pit as needed to replenish the product stockpiles. There will be no washing of the sand and gravel. Dust suppression systems are installed on all Milestone Materials crushing equipment and utilize water as a form of dust suppression mitigation.

After processing by the crushing and screening plant, the various products are stockpiled for later use. End-loaders are used to load the aggregate products into trucks from the stockpiles. The trucks are then weighed on a scale before leaving the site.

Occasionally, as recycle products become available, recycled concrete may be hauled to the pit for temporary storage and processing into aggregate products for resale. None of the recycle materials will be buried on site and all of the recycle materials will be temporarily stockpiled and hauled from the site after processing.

Typical equipment and staffing involved in the sand and gravel operation:

Overburden Removal:	1-2 backhoes 2-4 bulldozers 2-3 scrapers 1-3 haul trucks
Processing Operations:	1 crushing and screening plant 1-4 front end-loaders 1 bulldozer 1 fuel truck 1 water truck 1-4 conveyors/stackers 1-3 portable power generators
General:	Scale house/office Portable toilet
Employees:	1 Foreman 1-5 Operators

6.3 Operation Development Plan

Excavation of the sand and gravel will occur as described above. The portable crushing and screening operations, stockpile area, scale, and scale house may move throughout the property to minimize haul distances from working areas. Figure 4 displays distances from

the primary operations area to neighboring structures, showing most neighboring structures are located more than a quarter mile away from the primary operations area.

The proposed mining phases and extent are displayed in Appendix B. An access road from Lakken Road will enter the parcel on the southeast corner of the parcel. Here the access road will go straight west for approximately 300 feet and then gradually turns to the northwest and travels another approximate 250 feet to bring to the center of the parcel. A scale shack with scale will be located along this access road and will be monitored to ensure safety. The stockpiling and loading area will be located in this area as well. This will be the start of Phase 1. The mining operations will start in the northeast corner of Phase 1 and then gradually progress southeast, southwest and northwest. This operations description and pattern is depicted in Appendix B – Operations Plan [Phase 1] as a gradual clockwise pattern. A berm will be constructed in phase 1 with overburden along the southern edge of the parcel with maximum slopes of 3:1 within the 100 foot setback from the property line. Additional berms will be constructed, as mining progresses, to the west with maximum slopes of 3:1 within the 100 setback from the property line. These berms will reduce visibility and noise as well as maintain the aesthetics of the established greenspace of the area as well. Mining and processing equipment will be located within the exposed mine area, and moved to within each open area as mining progresses and reclamation occurs behind.

As mining advances into Phase 2, Phase 1 will have reclaimed slopes along the western and southern portions of the site. The stock piling and loading area will also migrate towards the center of the site as well. As operations continue in Phase 2, mining will progress in the southwestern portion of Phase 2 and then gradually progress north, northeast, east. This operations description and pattern is depicted in Appendix B – Operations Plan [Phase 2] as a gradual clockwise pattern. Berms will be constructed in Phase 2 with overburden along the western edge of the parcel with maximum slopes of 3:1 within the 100 foot setback from the property line. Additional berms will be constructed, as mining progresses, to the north with maximum slopes of 3:1 within the 100 foot setback from the property line.

As mining proceeds into Phase 3, Phase 2 will have reclaimed slopes along the western-northwestern portions of the site. Most of Phase 1 will be at or near the established reclaimed slopes as well as the final floor elevation. The stock piling and loading area will also migrate north in the site as well. As operations continue in Phase 3, mining will progress in the northwestern portion of Phase 3 and then gradually progress east, south and west. This operations description and pattern is depicted in Appendix B – Operations Plan [Phase 3] as a gradual clockwise pattern. Berms will be constructed in Phase 3 with overburden along the northern and eastern edges of the parcel with maximum slopes of 3:1 within the 100 foot setback from the property line. These berms will reduce visibility and noise as well as maintain the aesthetics of the established greenspace of the area as well.

As operations progress into the final stages of the site within Phase 3, reclamation will continue including reclaimed slopes along the northern-eastern portions of the site. Most of Phases 1 and 2 will be at or near the established reclaimed slopes as well as the final floor elevation. The stock piling and loading area will also shrink towards the center of the site. Upon completion of operations, reclamation will be completed within Phase 3, and all berms will have been utilized in the final reclamation. This is depicted in Appendix B – Operations Plan [Phase 4]. Final reclamation of the site is shown in Appendix B – Reclamation Plan [Phase 5].

Excavation limits follow a 100-foot setback from all property lines and public roads, 75-foot setback from any identified WDNR wetlands, and 50-foot setback from the RR2 zoned portion of the parcel. Of the 40 acres comprising all the parcel, the approximate mining extent will be 24 acres excavated at the pit.

Based on the geology and estimated resources available at the site, and typical operation history of other mine sites in the County, it is anticipated the mine may have an operational life ranging from 10 to 50 years.

6.4 Operation Schedule

Activity at the pit will normally occur during the construction season (March to November). However, reduced operations may occur December through February, as supply and demand for sand and gravel aggregate products warrant. The duration and frequency of activity in the pit is dependent upon construction project work in the area. Hours of operation at the pit are proposed to be 6:00am – 8:00pm Monday through Friday, with general quiet maintenance outside of that schedule.

6.5 Trucking, Transportation & Road Maintenance

Haul trucks will consist of traditional heavy-duty dump trucks designed to carry approximately 20 tons of aggregate per load. The number of truckloads transported in any day will vary depending on the demand and use for the intended project, and may be estimated at 10 to 50 trucks per day. However, this will not be a 24 hour, 7 days a week, 365 days per year operation; rather, it will be intermittent, with trucks hauling for a couple of days to several weeks, and then no trucking for an extended amount of time (weeks to months) as projects are completed (no further material delivery is required). General hauling hours* will match the operation hours pursuant to Section 6.4 or as approved by the county committee.

* Public works projects which require night time hauling would be done in conjunction with Wisconsin Act 12 2023 Section 66.0441(3)(c).

A haul route (for loaded trucks) will be established whereas loaded trucks shall not travel west on 30th Avenue from the site. Loaded trucks shall travel south on Lakken Road to 30th Avenue and head east to County Highway M (22nd Street), where they may head south to utilize 28th Avenue to head west when necessary. Empty trucks may utilize 30th Avenue in either direction. A road use maintenance agreement for Lakken Road and the eastern portion of 30th Avenue will be established and implemented with the appropriate municipalities upon final approval of all required permits.

6.6 Sand and Gravel Use

Milestone Materials plans to produce and sell the sand and gravel aggregate products primarily for future road and highway construction in the area, along with sales to local Townships and Municipalities. Most of the sand and gravel aggregate products produced by this operation will be used as base aggregate and fill materials as well as for the use in hot mix asphalt.

7.0 Environmental Considerations

7.1 Air Quality

Control of fugitive dust from roads in the operation and excavation area will be provided by use of a water truck that will spray water on the roads as necessary. Wet suppression will be used to supplement insitu moisture for control of fugitive dust emissions from the plant

equipment. Water is made available through filling of an on-site water tank which supplies water to associated operation equipment as needed; the tank is filled routinely by a delivery truck operated by Milestone Materials or other division of Mathy Construction that may be in the local area. The plant foreman will document the compliance activities associated with these requirements on a daily environmental tracking form. Records of daily, monthly and year-to-date production information will be available for inspection at the plant site.

7.2 Ground Water

No mining will be conducted in the water table. Investigation of well construction records surrounding the properties show the groundwater is expected to be between 1222' and 1226' MSL beneath the site. Mining will occur to a maximum depth of 1241' MSL to maintain a dry pit floor, staying approximately 15' above the underlying groundwater table.

The lubrication, fueling, and repair practices used to maintain the equipment are designed to eliminate petroleum products from ground contact. The Storm Water Pollution Prevention Plan (SWPPP) and the Spill Prevention Control and Countermeasures (SPCC) plans address practices for proper storage, handling, and use of petroleum products, as well as inspection and response procedures. Fuel for mobile equipment will be stored in an aboveground tank with secondary containment.

The pollution prevention practices addressed in site management planning minimize the opportunity for infiltrating water to carry contaminants to groundwater. Plant foremen will perform site inspections throughout the operating period. Observations and conditions will be reported daily for all applicable environmental programs.

Rain that falls in the excavation area will be contained and allowed to seep naturally into the underlying sand. When and where necessary, temporary earthen berms will be constructed and seeded to direct surface water flow to prevent surface water runoff from leaving the site.

7.3 Surface Water

The WNDR Storm Water Program regulates the proposed sand and gravel excavation operation. Operations are covered under the WDNR's Wisconsin Pollution Discharge Elimination System (WPDES) General Permit No. WI-0046515-07-1. The storm water permit coverage will be applied for after successful conditional use permit and reclamation plan approval by Washburn County.

The management practices required by the permit address both petroleum product handling and erosion control, including the on-site containment of storm water runoff for suspended solids control. With the exception of limited lengths of access road, all storm water and spring snowmelt water from the operation will be contained on site.

No surface water features are on or near the proposed site. Please see Figure 6 for further clarification.

7.4 Floodplain and Wetlands

The site is not located within a floodplain. The Wisconsin Wetland Inventory maintained by the Wisconsin DNR does not indicate any wetlands on the property, while the National Wetlands Inventory identifies wetland indicators in two small locations on the property, reference Figure 7. These wetlands will be investigated and as we progress forward with permitting activities, and excavation limits shall follow a 75-foot setback from all confirmed

WDNR wetlands. All appropriate permits and actions will be taken with the Department of Natural Resources as they have jurisdiction on such systems within our industry.

7.5 Waste Disposal and Recycling

Solid wastes generated in the course of production will be disposed of in dumpsters provided by licensed haulers. Regular disposal intervals will be maintained to provide adequate availability. There will be no hazardous wastes produced in conjunction with the excavation or processing operations. Used oil and lubricants from equipment maintenance will be collected for recycling by a licensed used-oil contractor. The waste receptacles will be located away from active operation areas. Sanitary facilities will be provided at the site by use of a portable chemical toilet.

7.6 Safety and Health

The United States Department of Labor, Mine Safety and Health Administration (MSHA) regulates the safety and health considerations of the sand and gravel excavation and processing operation. The site will be subject to annual inspection by MSHA and must meet the noise and dust exposure limits established for personnel employed in the operation activity.

Noise will be mitigated on the site by maintaining functional mufflers and exhaust systems on all internal combustion engines and by shielding mechanical processes with noise barriers. Based on noise studies conducted by Milestone Materials, aggregate production operations such as crushing have an originating decibel (db) level of around 100. The level drops down to 80-85 within the first 100 feet. After 200 feet, the level is around 70-75. After 400 feet, it is generally less than 70. Normal conversations register in the 60-70 db range.

Respirable dust exposure will be minimized at the site by use of wet suppression for processing aggregate materials and by controlling fugitive emissions from peripheral activities, including trucking. The company is committed to maintaining respirable dust limits within MSHA standards and providing a healthy environment for employees.

Hard hats are mandatory for all personnel within the excavation and processing areas. Visitors must have permission to enter the site and must observe all safety regulations while visiting the site.

8.0 Restoration Plan

The mining area will be reclaimed to passive recreation. A reclamation plan has been developed and shall be included with the reclamation permit application submitted to Washburn County. The reclamation plan is generally described in the operation plan under section 6.0 above and associated displays provided in Appendix B.

9.0 Financial Assurance

Upon approval of the reclamation permit and plan by Washburn County, the required financial assurance will be established with the County as necessary to cover the cost to reclaim all disturbed acres at the site at any given time.

10.0 Other Permits and Approvals

Separate filings will be made, as necessary, upon approval of the conditional use permit by Washburn County, including:

A. Washburn County Nonmetallic Mining Permit, and associated reclamation plan.

B. Driveway (access) off Lakken Road with County or Town.

C. Road maintenance agreement with affected municipalities.

D. Wisconsin Pollution Discharge Elimination System (WPDES) General Permit No. WI-0046515-07-1.

E. Mine site registration and assigned ID with Mine Safety and Health Administration.

F. Wetland Delineation and Mitigation with the Department of Natural Resources.

Copies of these permits and/or applications can be provided to the County upon request or as condition of the conditional use permit.

LIST OF FIGURES AND DRAWINGS

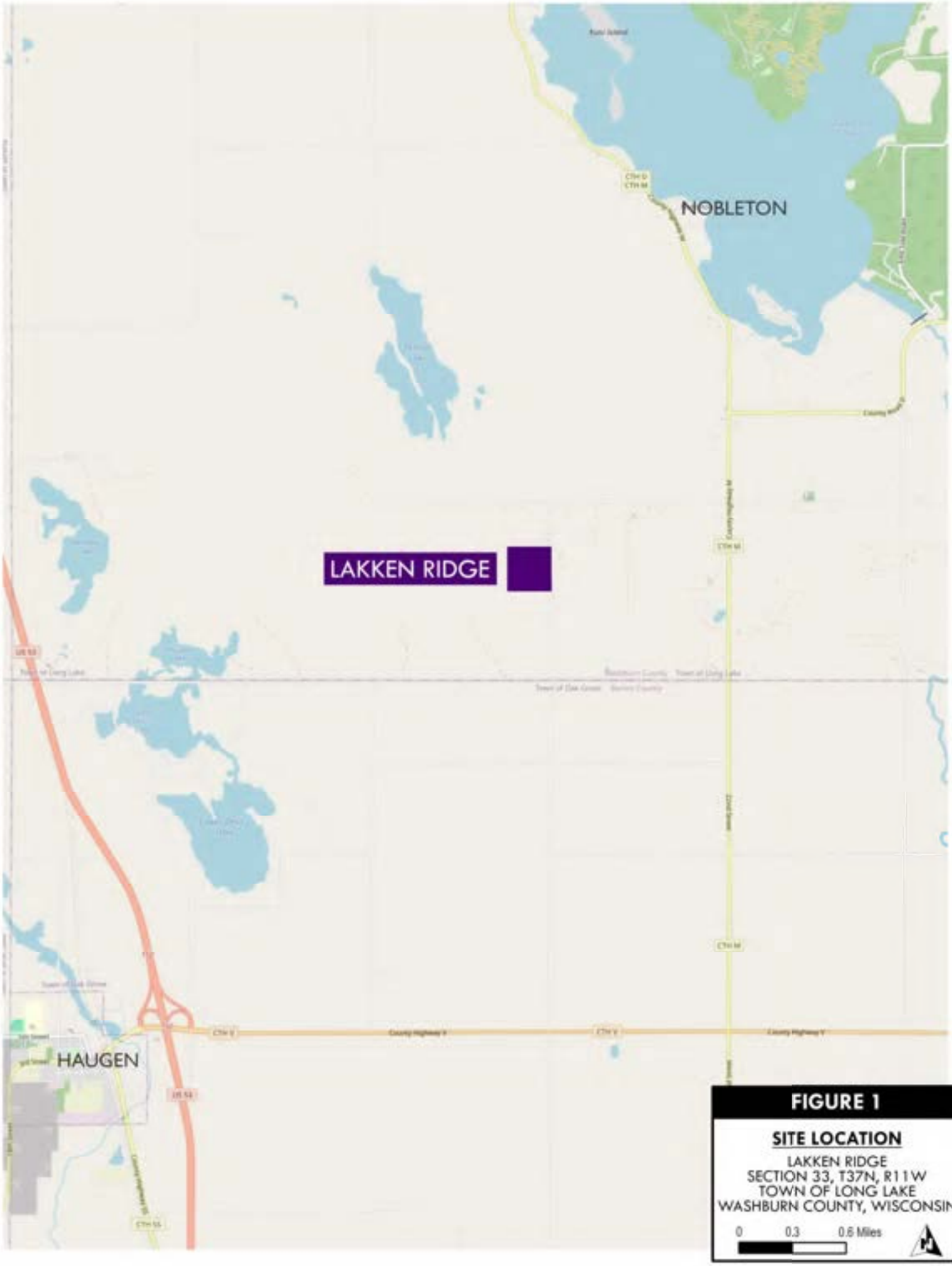


FIGURE 1

SITE LOCATION

LAKKEN RIDGE
SECTION 33, T37N, R11W
TOWN OF LONG LAKE
WASHBURN COUNTY, WISCONSIN

0 0.3 0.6 Miles

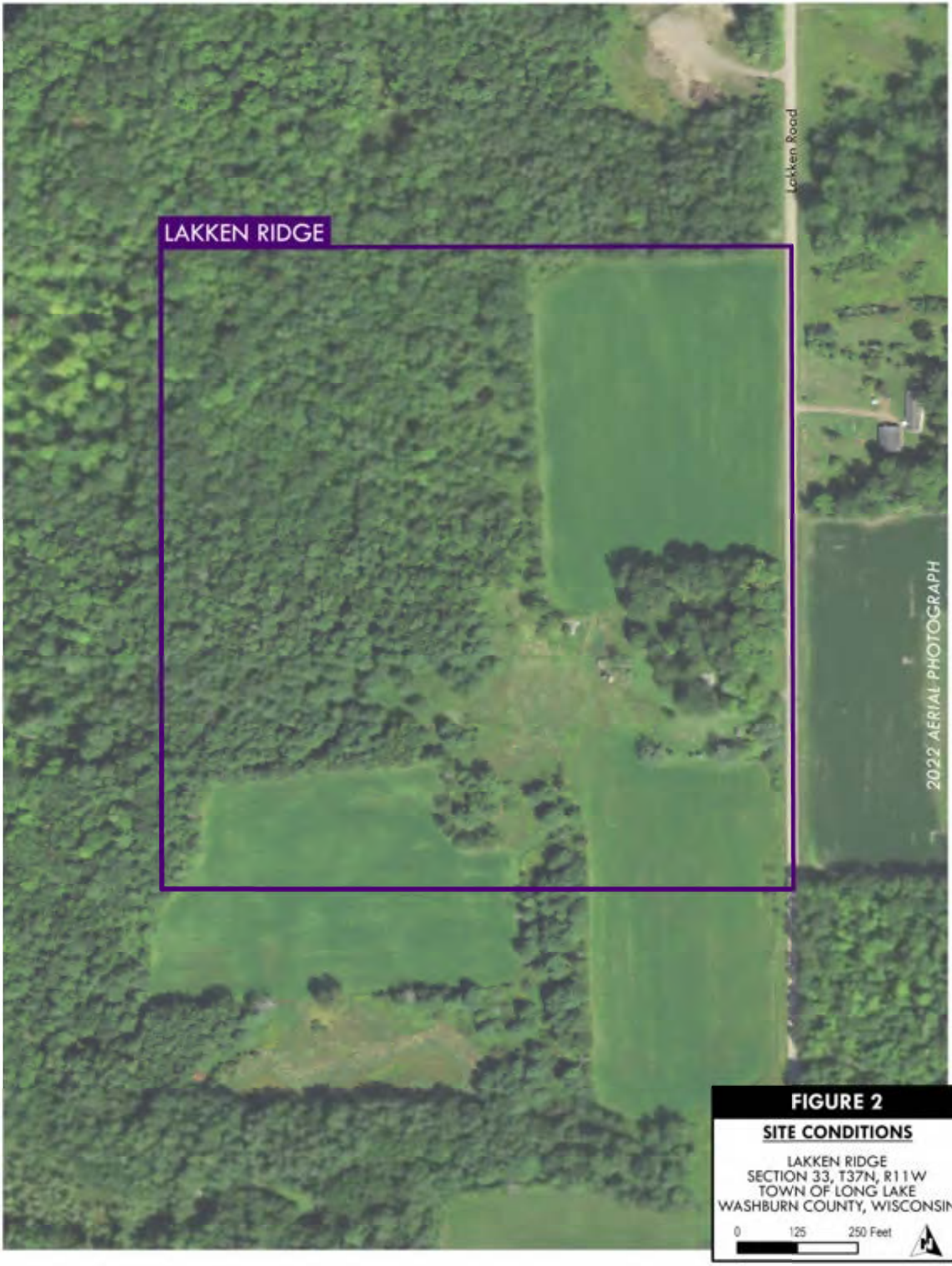


FIGURE 2

SITE CONDITIONS

LAKKEN RIDGE
SECTION 33, T37N, R11W
TOWN OF LONG LAKE
WASHBURN COUNTY, WISCONSIN

0 125 250 Feet

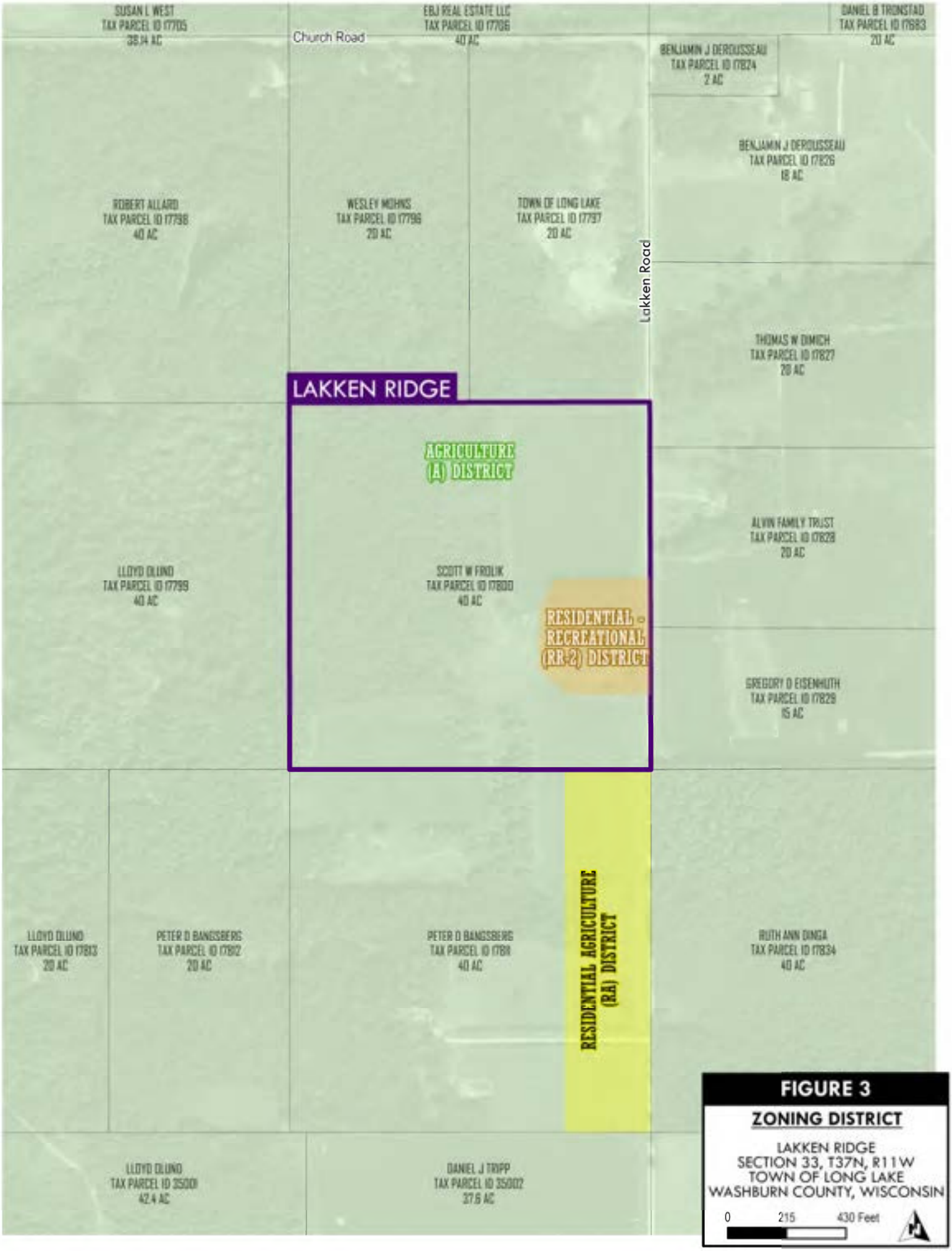


FIGURE 3

ZONING DISTRICT

LAKKEN RIDGE
SECTION 33, T37N, R11W
TOWN OF LONG LAKE
WASHBURN COUNTY, WISCONSIN

0 215 430 Feet

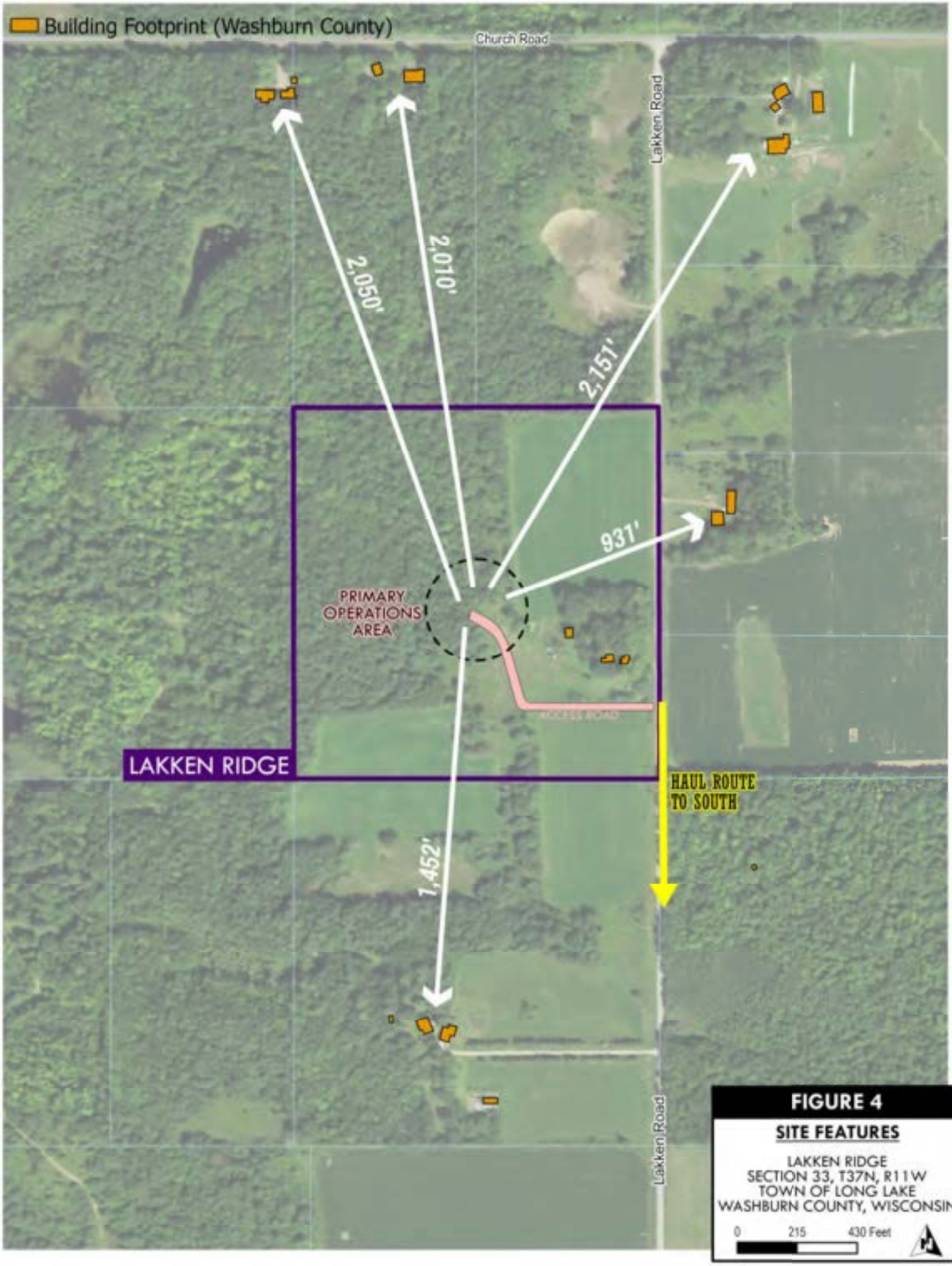


FIGURE 4

SITE FEATURES

LAKKEN RIDGE
SECTION 33, T37N, R11W
TOWN OF LONG LAKE
WASHBURN COUNTY, WISCONSIN

0 215 430 Feet

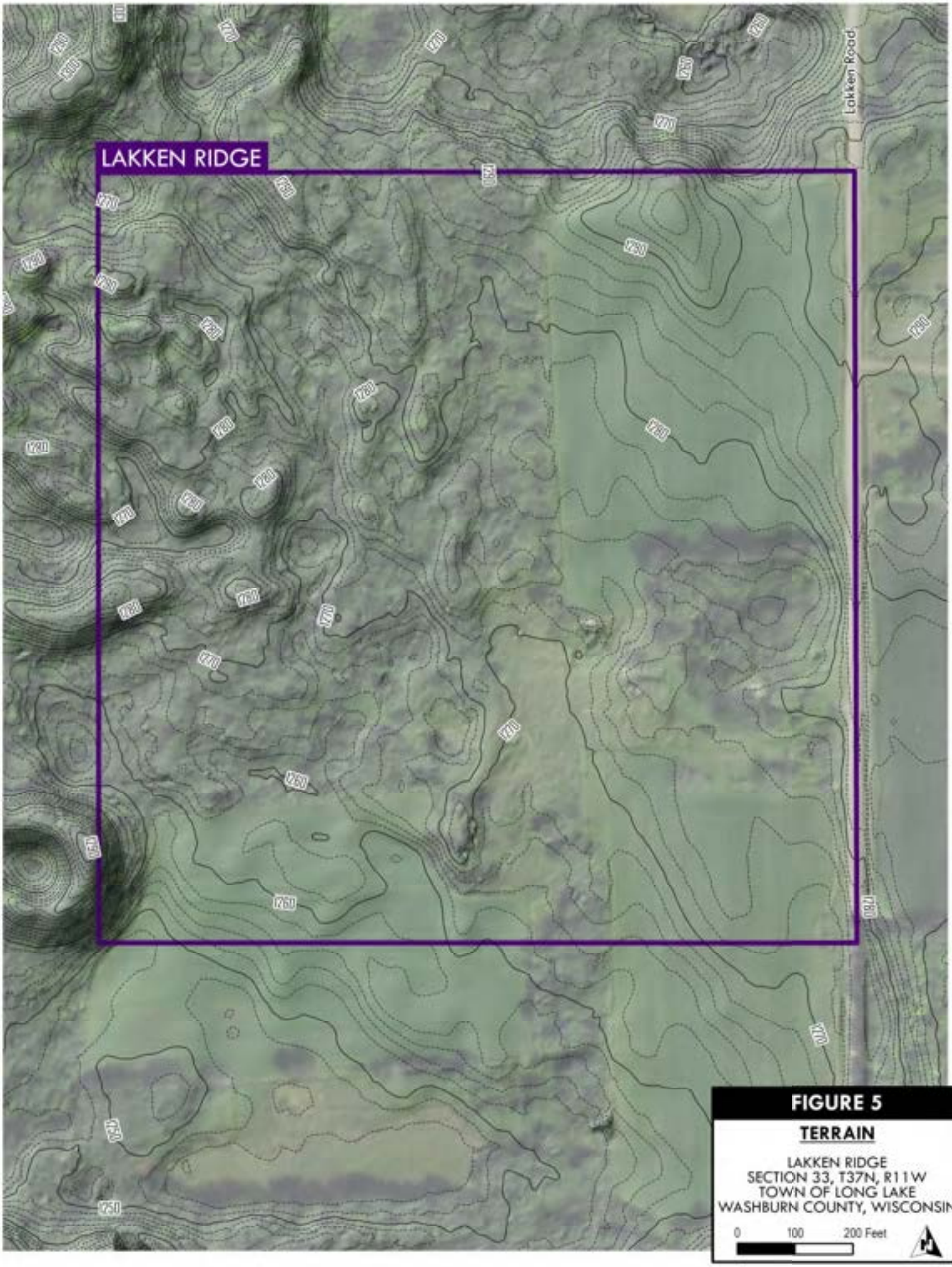


FIGURE 5

TERRAIN

LAKKEN RIDGE
SECTION 33, T37N, R11W
TOWN OF LONG LAKE
WASHBURN COUNTY, WISCONSIN

0 100 200 Feet

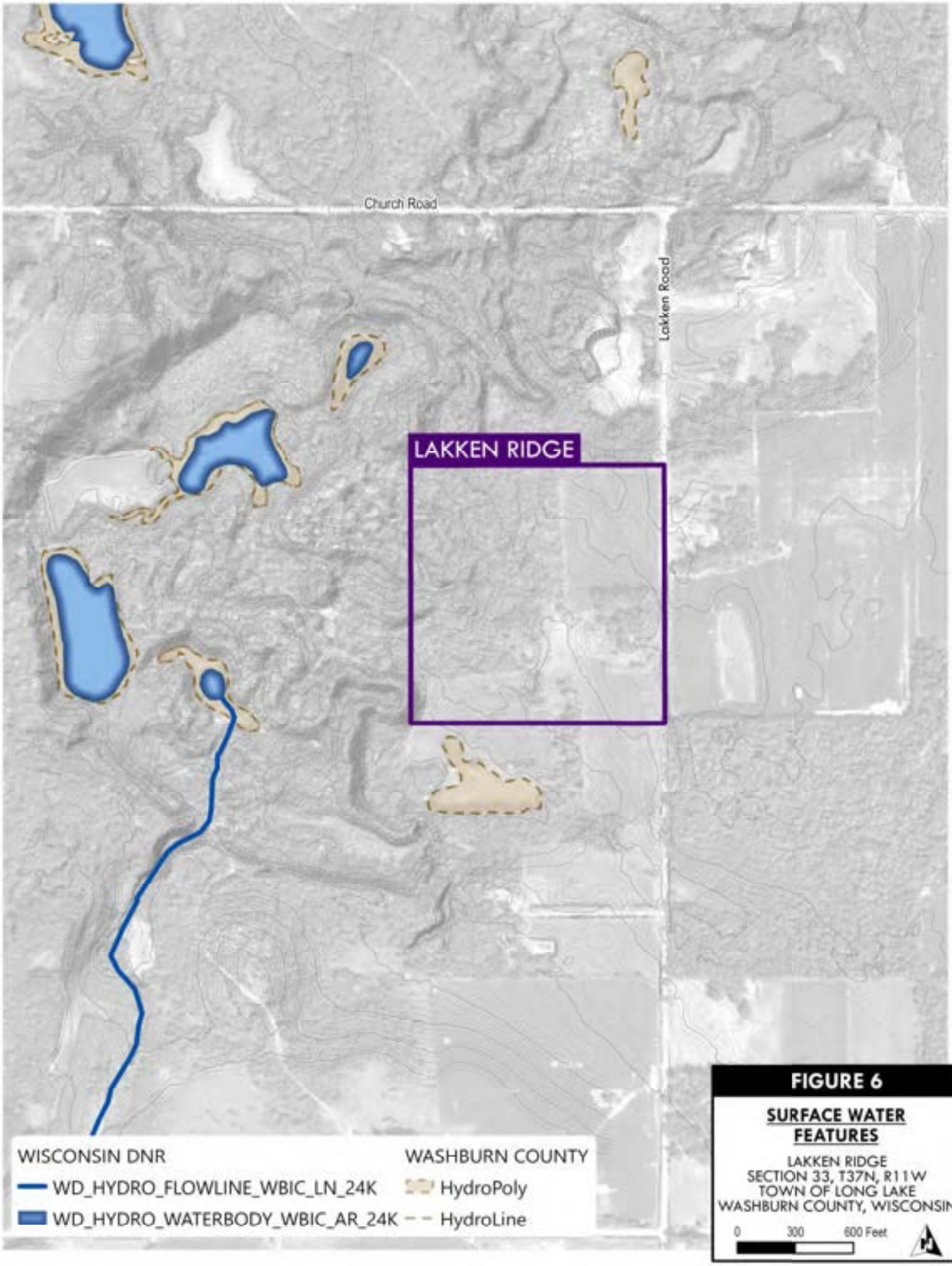


FIGURE 6

SURFACE WATER FEATURES

LAKKEN RIDGE
SECTION 33, T37N, R11W
TOWN OF LONG LAKE
WASHBURN COUNTY, WISCONSIN

0 300 600 Feet

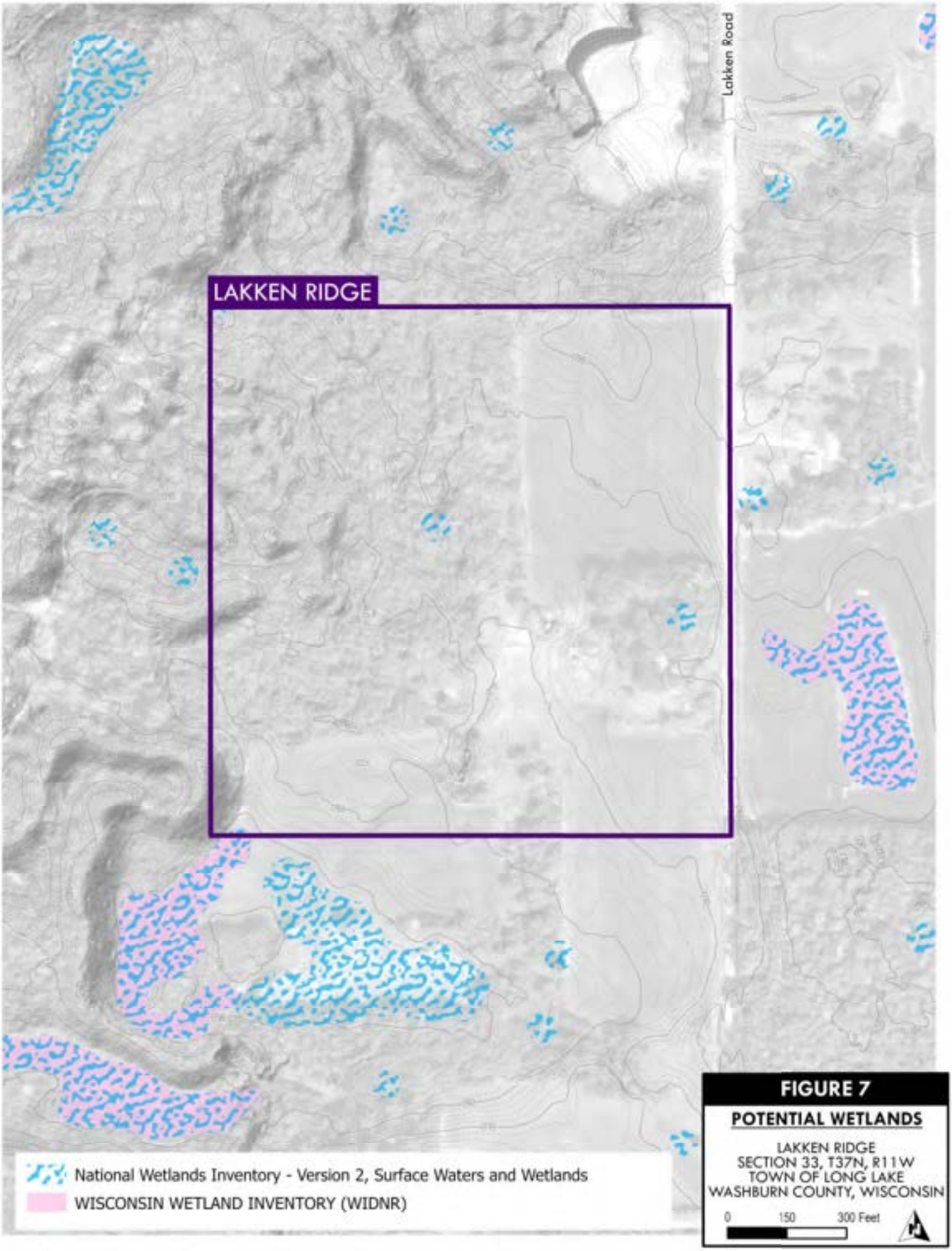


FIGURE 7

POTENTIAL WETLANDS

LAKKEN RIDGE
SECTION 33, T37N, R11W
TOWN OF LONG LAKE
WASHBURN COUNTY, WISCONSIN

0 150 300 Feet

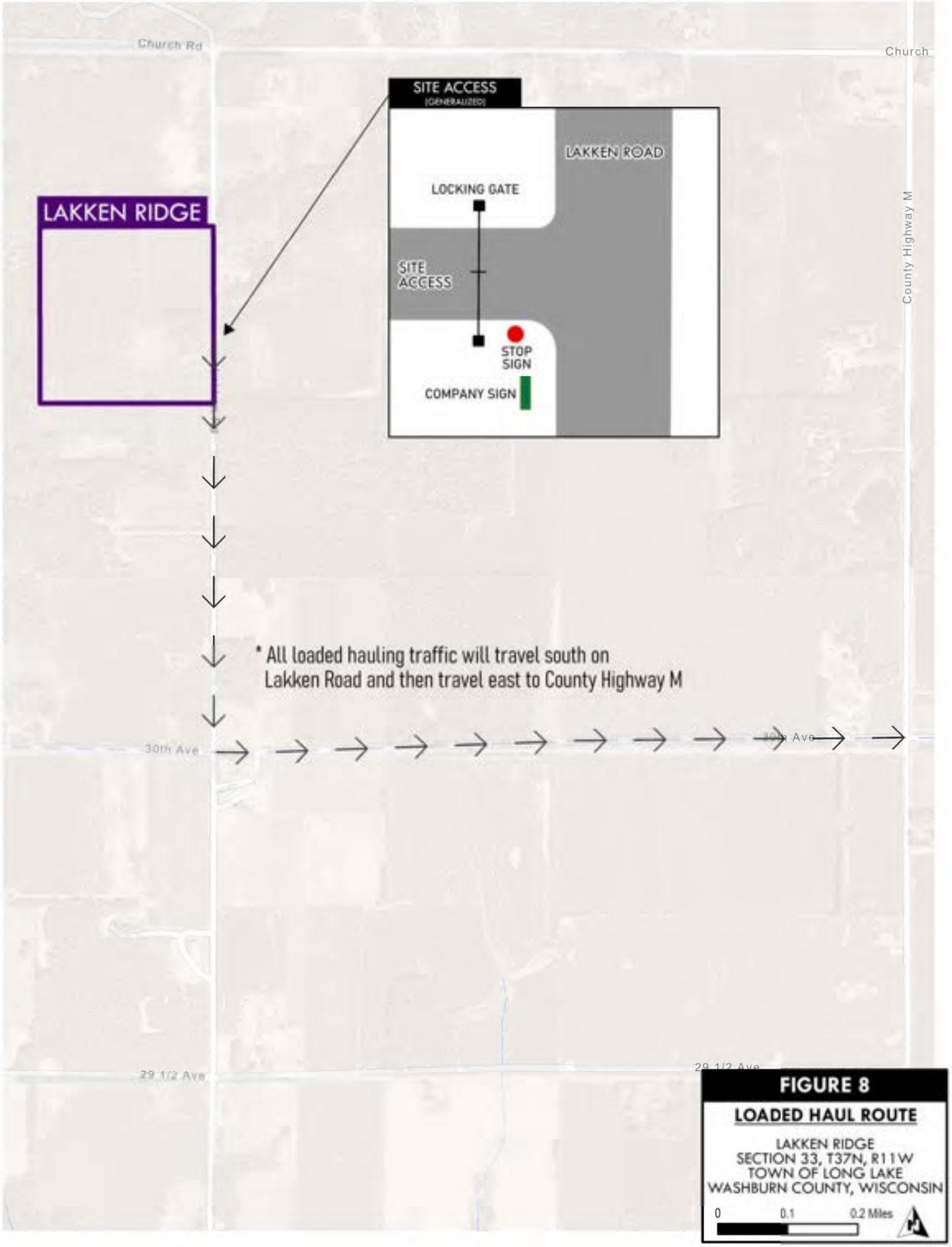
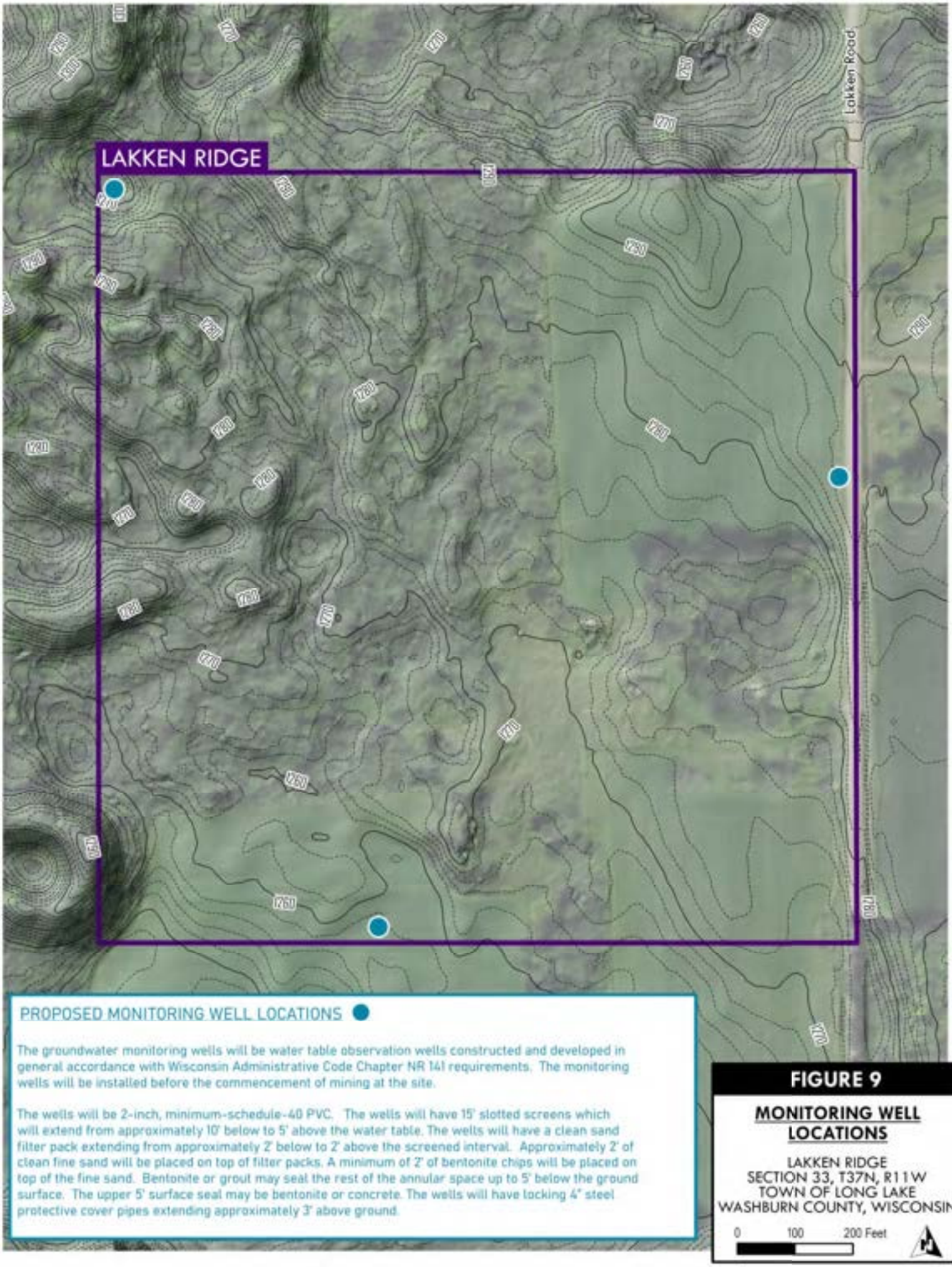


FIGURE 8

LOADED HAUL ROUTE

LAKKEN RIDGE
SECTION 33, T37N, R11W
TOWN OF LONG LAKE
WASHBURN COUNTY, WISCONSIN

0 0.1 0.2 Miles



PROPOSED MONITORING WELL LOCATIONS

The groundwater monitoring wells will be water table observation wells constructed and developed in general accordance with Wisconsin Administrative Code Chapter NR 141 requirements. The monitoring wells will be installed before the commencement of mining at the site.

The wells will be 2-inch, minimum-schedule-40 PVC. The wells will have 15' slotted screens which will extend from approximately 10' below to 5' above the water table. The wells will have a clean sand filter pack extending from approximately 2' below to 2' above the screened interval. Approximately 2' of clean fine sand will be placed on top of filter packs. A minimum of 2' of bentonite chips will be placed on top of the fine sand. Bentonite or grout may seal the rest of the annular space up to 5' below the ground surface. The upper 5' surface seal may be bentonite or concrete. The wells will have locking 4" steel protective cover pipes extending approximately 3' above ground.

FIGURE 9

MONITORING WELL LOCATIONS

LAKKEN RIDGE
SECTION 33, T37N, R11W
TOWN OF LONG LAKE
WASHBURN COUNTY, WISCONSIN

0 100 200 Feet

APPENDIX A

CUSTOM SOIL RESOURCE REPORT, GEOLOGY, AND HYDROGEOLOGY

Soil Resource Report, Geology, and Hydrogeology

Soil and Geology

A USDA NRCS Web Soils Survey soils report for the application property is provided herein. Soils found within the proposed future mining areas at the property primarily consist of Rosholt sandy loam and Angion silt loam soils.

The Rosholt soils at the site are well drained, occur on 6 percent to 35 percent slopes and are classified as farmland soils of statewide importance where slopes are less than 15 percent. The Rosholt soils at the site were formed in loamy glaciofluvial deposits over stratified sandy and gravelly outwash. The typical profile for the Rosholt series soils consists of a three-inch, sandy-loam, "A" horizon underlain by 25 inches of sandy loam, followed by 6 inches of gravelly loamy sand, followed by stratified sand and gravel.

The Angion soils at the site are well drained, occur on 2 percent to 6 percent slopes and are classified as prime farmland soils. The Angion soils at the site were formed in loess or silty alluvial deposits over stratified sandy and gravelly outwash. The typical profile for the Angion series soils consists of a 10-inch, silt-loam, "A" horizon underlain by 20 inches of silt loam, followed by 4 inches of sandy loam, followed by stratified sand and gravel.

Beneath the surficial soils at the site are outwash sand and gravel deposits of the Chetek and Sylvan Lake Members of the Copper Falls formation. This sand and gravel was deposited by meltwater streams draining off of the Superior and Chippewa Lobes of the Laurentide Ice Sheet, during the St. Croix and Late Chippewa Phases of Wisconsin Glaciation, between 15,000 and 16,000 years ago. These meltwater deposits of the Copper Falls Formation are the targeted deposits for extraction at the site and are of suitable quality for use in commercial and state asphalt mixes, commercial and state concrete mix aggregate, and road base aggregate along with other aggregate and landscape products.

The unconsolidated glacial sand and gravel deposits are expected to be approximately 100 feet thick beneath the site. The bedrock beneath the local glacial deposits at the site is

expected to consist of approximately 100 feet of sandstone of Cambrian age underlain by Barron Quartzite of Precambrian age.

Hydrogeology

Private water supply wells in the vicinity of the application property are drilled into and completed in the glacial sand and gravel and Cambrian sandstone aquifers. A detailed review of well construction reports has been completed for 14 wells within 2.3 miles of the application property. A summary of the reviewed well construction report information can be seen in the below **Table 1**.

Well ID	Land Elevation (Ft, MSL)	Well Depth (Ft)	Depth to Water (Ft)	Pumping Water Level (Ft)	Pumping Rate (GPM)	Pumping Time (Hours)	Water Table Elevation	Aquifer Formation	Well Open Interval (Ft)	Well Radius (Inches)	Aquifer Thickness (Ft)	*Hydraulic Conductivity (K, Ft/Day)	Well Use
CX359	1284	80	64	66	15	1	1220	S&G	4	3	16	173.72	Home
DC996	1230	59	35	36	15	1	1195	S&G	9	3	24	194.47	Potatoe Washing
DF267	1312	119	97	100	15	1	1215	S&G	4	3	24	112.27	Restaurant
FS605	1265	72	57	60	15	1	1208	S&G	4	3	15	114.19	Private
KA847	1276	88	60	75	15	1	1216	S&G	4	3	28	21.57	Mobile Home
OV966	1294	92	68	80	15	1	1226	S&G	3	3	24	33.20	Private
RP862	1298	100	70	72	15	2	1228	S&G	3	3	30	213.20	Private
RS324	1302	168	75	85	15	1	1227	S&G	4	3	93	38.39	Private
UH275	1271	93	56	70	20	2	1215	S&G	4	3	37	32.18	Private
UD194	1393	180	160	167	6	12	1233	Sandstone	4	3	82	21.73	Home & Barn
UN883	1334	244	118	140	25	1	1216	Sandstone	126	3	126	0.90	Shop
BCX021	1279	157	60	70	5	24	1219	Sandstone & Shale	10	3	55	5.80	Private
EP560	1370	181	150	165	6	2	1220	Sand	4	3	31	8.65	Private
WQ702	1354	155	132	135	12	1	1222	Sand	4	3	23	89.22	Private

Well ID	Location	Driller's Log 1	Driller's Log 2	Driller's Log 3
CX359	NE, SE, Sec. 33, T37N, R11W	0-8 Caving Sand, Grav, & Clay; 8-60 Caving Grav.	60-70 Caving S&G, 71-73 Caving Sand & Clay	73-80 Caving S&G
DC996	SE, SE, Sec. 2, T36N, R11W	0-17 Caving S&G	17-45 Caving Sand	45-59 Caving S&G
DF267	SE, NE, Sec. 27, T37N, R11W	0-8 Non-Caving Brn. S&G	8-119 Caving Brn. S&G	
FS605	NW, SE, Sec. 3, T36N, R11W	0-6 Non-Caving S&G & Clay, 6-57 Caving S&G	57-70 Caving Brn. Sand	70-72 Caving Brn S&G
KA847	SE, SE, Sec. 34, T37N, R11W	0-75 Caving Brn. Grav.	75-85 Non-Caving Brn. S&G	85-88 Caving Brn. S&G
OV966	SW, NW, Sec. 34, T37N, R11W	0-5 Clay, 5-60 Caving Gravel	60-88 Non-Caving Sand, Grav., & Clay	88-92 Caving S&G
RP862	SW, SW, Sec. 27, T37N, R11W	0-31 Non-Caving S&G w/ Boulders	31-70 Non-Caving S&G	70-100 Caving S&G
RS324	NE, NE, Sec. 33, T37N, R11W	0-9 Gravel & Clay, 9-75 Caving Tan S&G	75-165 Non-Caving Tan Sand, Grav., & Clay	165-168 Caving Tan S&G
UH275	NE, NE, Sec. 35, T37N, R11W	0-46 Caving S&G	46-66 Red Clay Hardpan & Rocks	66-93 Brn. S&G
UD194	NW, NW, Sec. 33, T37N, R11W	0-98 Non-Caving Brn. Grav. & Clay	98-180 Caving & Non-Caving Sandstone	
UN883	SE, NE, Sec. 4, T36N, R11W	0-116 Hardpan & Boulders	116-244 Sandtone (129-210 Sloughing)	
BCX021	SE, NE, Sec. 33, T37N, R11W	0-6 Clay, 6-20 Clean Grav.	20-60 Hardpan & Rock, 60-102 Hardpan	102-157 Sandstone & Shale
EP560	SE, SE, Sec. 33, T37N, R11W	0-70 Non-Caving Brn Sand, Gravel, & Clay	70-181 Caving Yellow Sand	
WQ702	NW, NW, Sec. 4, T36N, R11W	0-71 Non-Caving Brn. Grav. & Clay	71-155 Caving Yellow Sand	

*Estimated following Bradbury and Rothschild (1985)

Table 1: Area Well Information

As shown in **Table 1**, the reviewed area wells are primarily used for private or residential uses, have diameters of six inches, and yielded 5 to 25 gallons per minute (average 12.0 GPM) during pump tests. The reviewed area sand and gravel wells were drilled at land surface elevations ranging from 1230 to 1312 feet MSL (average 1281.3 feet MSL), were

installed to depths ranging from 59 to 168 feet (average 96.8 feet), had static water levels ranging from 35 to 97 feet (average 64.7 feet), and had static water elevations ranging from 1195 to 1228 feet MSL (average 1216.7 feet MSL). The reviewed area sandstone wells were drilled at land surface elevations ranging from 1279 to 1393 feet MSL (average 1346 feet MSL), were installed to depths ranging from 155 to 244 feet (average 183.4 feet), had static water levels ranging from 60 to 160 feet (average 124 feet), and had static water elevations ranging from 1216 to 1233 feet MSL (average 1222 feet MSL).

Based on the water levels in the nearby water supply wells and the elevation of nearby lakes and surface waters, the groundwater table beneath the application property is expected to range from 1226 feet MSL in the northwest to 1222 feet MSL in the southeast. Groundwater beneath the application property is expected to flow to the southeast towards Brill River at an estimated velocity of 2/3 feet per day or 243.3 feet per year.

Map Scale: 1:3,070 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 45 90 180 270

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Washburn County, Wisconsin
Survey Area Data: Version 24, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 30, 2022—Sep 1, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
38C	Rosholt sandy loam, 6 to 15 percent slopes	19.4	49.1%
38D	Rosholt sandy loam, 15 to 35 percent slopes	2.1	5.4%
543B	Anigon silt loam, 2 to 6 percent slopes	18.0	45.5%
Totals for Area of Interest		**39.5**	**100.0%**

Map Unit Description

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named, soils that are similar to the named components, and some minor components that differ in use and management from the major soils.

Most of the soils similar to the major components have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Some minor components, however, have properties and behavior characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Additional information about the map units described in this report is available in other soil reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the soil reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description

Washburn County, Wisconsin

38C—Rosholt sandy loam, 6 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2tnzf
Elevation: 690 to 1,460 feet

Mean annual precipitation: 27 to 36 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 80 to 150 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Rosholt and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rosholt

Setting

Landform: Terraces, hillslopes
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Side slope, riser
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy glaciofluvial deposits over stratified sandy and gravelly outwash

Typical profile

A - 0 to 3 inches: sandy loam
E - 3 to 8 inches: sandy loam
B/E - 8 to 20 inches: sandy loam
Bt1 - 20 to 28 inches: sandy loam
2Bt2 - 28 to 34 inches: gravelly loamy sand
2C - 34 to 79 inches: stratified sand to very gravelly coarse sand

Properties and qualities

Slope: 6 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: A
Ecological site: F090BY016WI - Loamy Upland
Forage suitability group: Mod AWC, adequately drained (G090AY005WI)
Other vegetative classification: Acer saccharum - Tsuga canadensis / Maianthemum canadense , Sugar Maple - Eastern Hemlock / Qild Lily-of-the-valley (ATM), Acer

saccharum / Vaccinium angustifolium - Desmodium glutinosum , Sugar Maple / Low Sweet Blueberry - Pointed-leaved Tick Trefoil (AVDe), Mod AWC, adequately drained (G090AY005WI)

Hydric soil rating: No

Minor Components

Chetek

Percent of map unit: 7 percent
Landform: Terraces, hillslopes
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Side slope, riser
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: F090BY021WI - Dry Loamy Upland
Other vegetative classification: Acer saccharum / Vaccinium angustifolium - Desmodium glutinosum , Sugar Maple / Low Sweet Blueberry - Pointed-leaved Tick Trefoil (AVDe), Low AWC, adequately drained (G090AY002WI)
Hydric soil rating: No

Antigo

Percent of map unit: 3 percent
Landform: Terraces, hillslopes
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Side slope, riser
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: F090BY016WI - Loamy Upland
Other vegetative classification: Acer saccharum / Hydrophyllum virginianum , Sugar Maple / Virginia Waterleaf (AH), Mod AWC, adequately drained (G090BY005WI)
Hydric soil rating: No

Cress

Percent of map unit: 3 percent
Landform: Terraces, hillslopes
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Side slope, riser
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: F090BY019WI - Dry Sandy Upland
Other vegetative classification: Acer saccharum / Vaccinium angustifolium - Desmodium glutinosum , Sugar Maple / Low Sweet Blueberry - Pointed-leaved Tick Trefoil (AVDe), Pinus strobus - Acer rubrum / Vaccinium angustifolium - Amphicarpa bracteata , Eastern White Pine - Red Maple / Low Sweet Blueberry - Hog-peanut (PArVAm), Low AWC, adequately drained (G090AY002WI)
Hydric soil rating: No

Scott lake

Percent of map unit: 2 percent
Landform: Flats, terraces, hillslopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope, tread, rise
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F090BY016WI - Loamy Upland
Other vegetative classification: Acer saccharum - Tsuga canadensis / Maianthemum canadense , Sugar Maple - Eastern Hemlock / Qild Lily-of-the-valley (ATM), Mod AWC, adequately drained (G090AY005WI)
Hydric soil rating: No

38D—Rosholt sandy loam, 15 to 35 percent slopes

Map Unit Setting

National map unit symbol: 2tnzg
Elevation: 790 to 1,460 feet
Mean annual precipitation: 27 to 36 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 80 to 150 days
Farmland classification: Not prime farmland

Map Unit Composition

Rosholt and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rosholt

Setting

Landform: Terraces, hillslopes
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Side slope, riser
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy glaciofluvial deposits over stratified sandy and gravelly outwash

Typical profile

A - 0 to 3 inches: sandy loam
E - 3 to 8 inches: sandy loam
B/E - 8 to 20 inches: sandy loam
Bt1 - 20 to 28 inches: sandy loam
2Bt2 - 28 to 34 inches: gravelly loamy sand
2C - 34 to 79 inches: stratified sand to very gravelly coarse sand

Properties and qualities

Slope: 15 to 35 percent
Depth to restrictive feature: More than 80 inches

Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: F090AY016WI - Loamy Upland
Forage suitability group: Mod AWC, adequately drained (G090AY005WI)
Other vegetative classification: Acer saccharum - Tsuga canadensis / Maianthemum canadense , Sugar Maple - Eastern Hemlock / Qild Lily-of-the-valley (ATM), Acer saccharum / Vaccinium angustifolium - Desmodium glutinosum , Sugar Maple / Low Sweet Blueberry - Pointed-leaved Tick Trefoil (AVDe), Mod AWC, adequately drained (G090AY005WI)
Hydric soil rating: No

Minor Components

Chetek

Percent of map unit: 10 percent
Landform: Terraces, hillslopes
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Side slope, riser
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: F090AY021WI - Dry Loamy Upland
Other vegetative classification: Acer saccharum / Vaccinium angustifolium - Desmodium glutinosum , Sugar Maple / Low Sweet Blueberry - Pointed-leaved Tick Trefoil (AVDe), Low AWC, adequately drained (G090AY002WI)
Hydric soil rating: No

Cress

Percent of map unit: 3 percent
Landform: Terraces, hillslopes
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Side slope, riser
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: F090AY019WI - Dry Sandy Upland
Other vegetative classification: Acer saccharum / Vaccinium angustifolium - Desmodium glutinosum , Sugar Maple / Low Sweet Blueberry - Pointed-leaved Tick Trefoil (AVDe), Pinus

strobus - Acer rubrum / Vaccinium angustifolium - Amphicarpa bracteata , Eastern White Pine - Red Maple / Low Sweet Blueberry - Hog-peanut (PArVAm), Low AWC, adequately drained (G090AY002WI)

Hydric soil rating: No

Antigo

Percent of map unit: 2 percent
Landform: Terraces, hillslopes
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Side slope, riser
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: F090AY016WI - Loamy Upland
Other vegetative classification: Acer saccharum / Hydrophyllum virginianum , Sugar Maple / Virginia Waterleaf (AH), Mod AWC, adequately drained (G090BY005WI)
Hydric soil rating: No

543B—Anigon silt loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: h27g
Elevation: 800 to 1,950 feet
Mean annual precipitation: 28 to 36 inches
Mean annual air temperature: 39 to 48 degrees F
Frost-free period: 120 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Anigon and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Anigon

Setting

Landform: Stream terraces, outwash plains
Landform position (two-dimensional): Summit, backslope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loess or silty alluvium underlain by stratified sandy and gravelly outwash

Typical profile

Ap - 0 to 10 inches: silt loam
E - 10 to 14 inches: silt loam
B/E - 14 to 20 inches: silt loam
Bt1 - 20 to 30 inches: silt loam
2Bt - 30 to 34 inches: sandy loam
3C - 34 to 60 inches: stratified sand to very gravelly coarse sand

Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Ecological site: F090BY016WI - Loamy Upland
Forage suitability group: High AWC, adequately drained (G090AY008WI)
Other vegetative classification: Acer saccharum / Caulophyllum thalictroides - Circaea quadrisulcata , Sugar Maple / Blue Cohosh - Enchanter's Nightshade (ACaCi), High AWC, adequately drained (G090AY008WI)
Hydric soil rating: No

Minor Components

Brill

Percent of map unit: 10 percent
Ecological site: F090BY016WI - Loamy Upland
Other vegetative classification: Acer saccharum / Caulophyllum thalictroides - Circaea quadrisulcata , Sugar Maple / Blue Cohosh - Enchanter's Nightshade (ACaCi)
Hydric soil rating: No

Rosholt

Percent of map unit: 8 percent
Ecological site: F090BY016WI - Loamy Upland
Other vegetative classification: Acer saccharum - Tsuga canadensis / Maianthemum canadense , Sugar Maple - Eastern Hemlock / Qild Lily-of-the-valley (ATM), Acer saccharum / Vaccinium angustifolium - Desmodium glutinosum , Sugar Maple / Low Sweet Blueberry - Pointed-leaved Tick Trefoil (AVDe)
Hydric soil rating: No

Poskin

Percent of map unit: 2 percent
Ecological site: F090BY011WI - Moist Loamy Lowland
Other vegetative classification: Acer rubrum - Abies balsamea / Cornus canadensis , Red Maple - Balsam Fir / Bunchberry (ArAbCo)

Hydric soil rating: No

Data Source Information

Soil Survey Area: Washburn County, Wisconsin
Survey Area Data: Version 24, Sep 3, 2024

APPENDIX B

OPERATIONS PLAN

LAKKEN ROAD

EXISTING CONDITIONS

Lakken Ridge

- Property Boundary
- Mining Phases (Approx.)
- RR-2 District
- Buildings
- 10ft Contours
- 2ft Contours

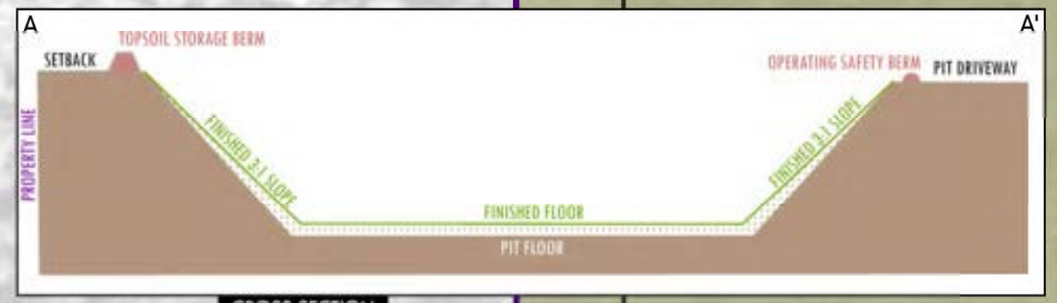
Lakken Road
Section 33, T37N, R11W
Town of Long Lake
Washburn County, Wisconsin

MILESTONE MATERIALS
A Division of Mathy Construction Co.

DATE: 12/4/2024 DRAWN BY: AJP
IMAGERY DATE: 2020

0 25 50 100 150
US Feet

** This plan is conceptual. Modifications are likely and may be made based upon future unforeseen conditions or circumstances.



CROSS SECTION
(GENERALIZED)

LAKKEN ROAD

BERM [PHASE 4-5]

[3:1 MAXIMUM SLOPES AT BOUNDARIES]

BERM [PHASE 1-2-3]

[3:1 MAXIMUM SLOPES AT BOUNDARIES]

1

2

3

4

5

A

A'

** This plan is conceptual. Modifications are likely and may be made based upon future unforeseen conditions or circumstances.

OPERATIONS PLAN [PHASE 1]

Lakken Ridge

- Property Boundary
- Mining Phases (Approx.)
- Access Road
- Berm
- Stockpiling & Loading Area
- Mining Area
- Woodland
- Greenspace
- RR-2 District
- Buildings

Lakken Road
Section 33, T37N, R11W
Town of Long Lake
Washburn County, Wisconsin

MILESTONE MATERIALS
A Division of Mathy Construction Co.

DATE: 12/4/2024 DRAWN BY: AJP
IMAGERY DATE: 2022

0 25 50 100 150
US Feet

BERM [PHASE 2-3]

[3:1 MAXIMUM SLOPES AT BOUNDARIES]

BERM [PHASE 1-2]

[3:1 MAXIMUM SLOPES AT BOUNDARIES]

LAKKEN ROAD

1

2

3

RECLAIMED SLOPES

RECLAIMED SLOPES

RECLAIMED SLOPES

OPERATIONS PLAN [PHASE 2]

Lakken Ridge

- Property Boundary
- Mining Phases (Approx.)
- Reclamation Areas
- Access Road
- Berms
- Stockpiling & Loading Area
- Mining Area
- Greenspace
- Woodland
- RR-2 District
- Buildings

Lakken Road
Section 33, T37N, R11W
Town of Long Lake
Washburn County, Wisconsin

MILESTONE MATERIALS

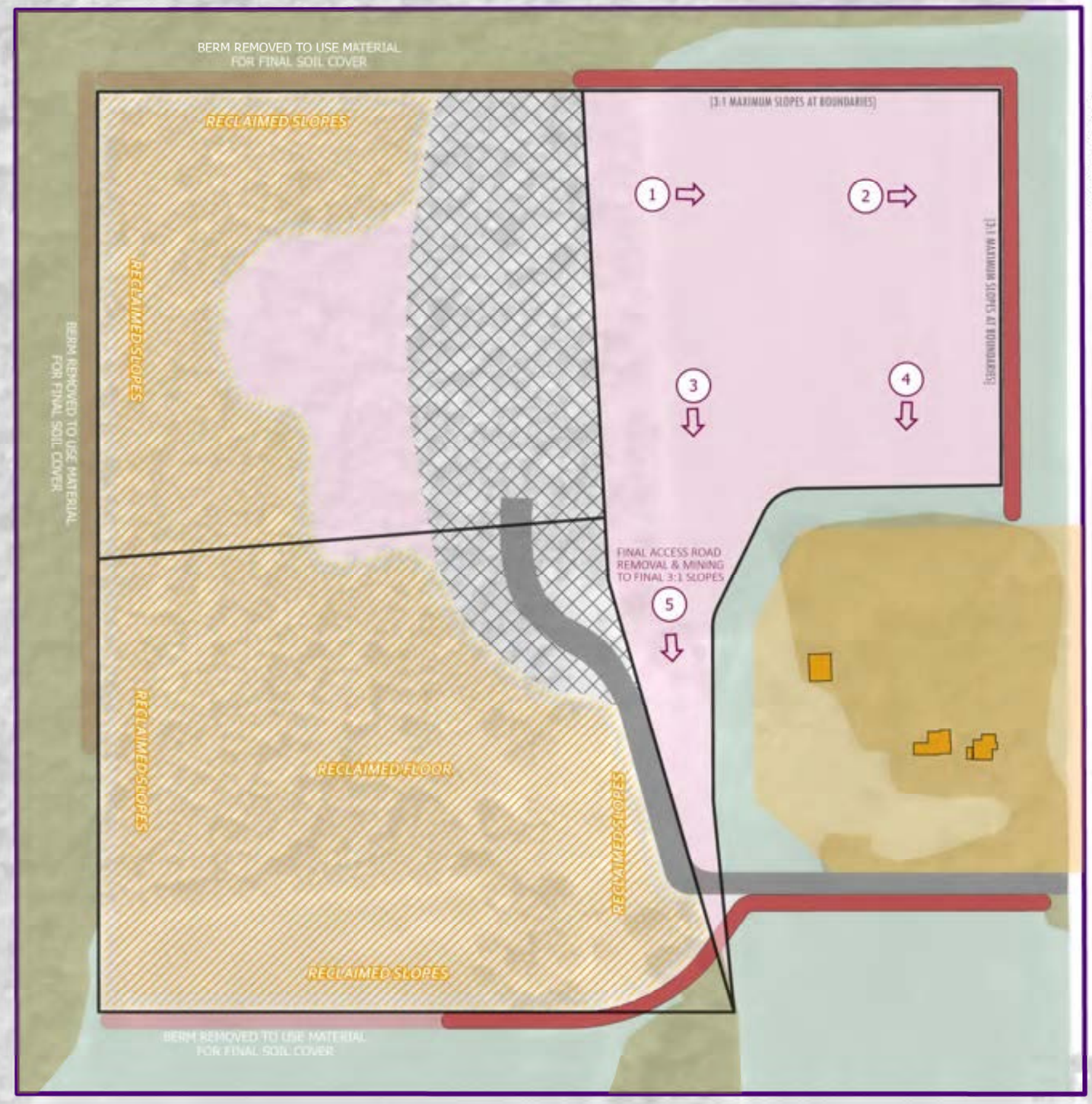
A Division of Mathy Construction Co.

DATE: 12/4/2024 DRAWN BY: AJP
IMAGERY DATE: 2022

0 25 50 100 150

US Feet

** This plan is conceptual. Modifications are likely and may be made based upon future unforeseen conditions or circumstances.



OPERATIONS PLAN [PHASE 3]

Lakken Ridge

- Property Boundary
- Mining Phases (Approx.)
- Reclamation Areas
- Access Road
- Berms
- Berms (Removed)
- Stockpiling & Loading Area
- Mining Area
- Woodland
- Greenspace
- RR-2 District
- Buildings

Lakken Road
Section 33, T37N, R11W
Town of Long Lake
Washburn County, Wisconsin

MILESTONE MATERIALS
A Division of Maltby Construction Co.

DATE: 12/4/2024 DRAWN BY: AJP
IMAGERY DATE: 2022

0 25 50 100 150
US Feet

** This plan is conceptual. Modifications are likely and may be made based upon future unforeseen conditions or circumstances.

LAKKEN ROAD

RECLAIMED PIT

OPERATIONS PLAN [PHASE 4]

Lakken Ridge

- Property Boundary
- Mining Phases (Approx.)
- Reclamation Areas
- Access Road
- Greenspace
- Woodland
- RR-2 District
- Buildings

Lakken Road
Section 33, T37N, R11W
Town of Long Lake
Washburn County, Wisconsin

MILESTONE MATERIALS
A Division of Mathy Construction Co.

DATE: 12/4/2024 DRAWN BY: AJP
IMAGERY DATE: 2022

0 25 50 100 150
US Feet

** This plan is conceptual. Modifications are likely and may be made based upon future unforeseen conditions or circumstances.

LAKKEN ROAD

FINAL RECLAIMED
FLOOR ELEVATION 1241'

A

A'

CROSS SECTION
(GENERALIZED)

** This plan is conceptual. Modifications are likely and may be made based upon future unforeseen conditions or circumstances.

RECLAMATION PLAN [PHASE 5]

Lakken Ridge

- Property Boundary
- Contours (10 ft)
- Contours (2 ft)
- Greenspace
- Woodland
- Access Road
- RR-2 District
- Buildings

Lakken Road
Section 33, T37N, R11W
Town of Long Lake
Washburn County, Wisconsin

MILESTONE MATERIALS
A Division of Mathy Construction Co.

DATE: 12/4/2024 DRAWN BY: AJP
IMAGERY DATE: 2022

0 25 50 100 150
US Feet

APPENDIX C

TOWN OF LONG LAKE NON-METALLIC MINING ORDINANCE

SUPPLEMENTARY

Town of Long Lake Information

For Reference Only

Pursuant to 2023 Wisconsin Act 12

2023 Assembly Bill 245

All information contained in the Town of Long Lake Ordinance adopted January 10, 2017 has been addressed in the Washburn County Conditional Use Application previously attached.

TABLE OF CONTENTS

1.0 Introduction & Purpose

Milestone Materials (division of Mathy Construction Company) proposes to operate a gravel pit (nonmetallic mining) within the Town of Long Lake in Washburn County. This Supplementary to the Washburn County Conditional Use Permit application includes information pertinent to the Town of Long Lake Nonmetallic Mining Ordinance and associated Town of Long Lake Non-Metallic Mining Application.

1.1 Legal Description

Tax ID# 17800: 65-026-2-37-11-33-1 04-000-001000, SE NE DOC# 407290 WD, Section 33, Township 37 N, Range 11 W. 40 acres.

1.2 Tax Parcel Number

Tax ID# 17800.

1.3 Name and Address of Surface Land Owner

Scott Frolik, 2463 12 ¾ Ave., Cameron, WI 54822-8725.

1.4 Name and Address of Mineral Owner

Milestone Materials, 920 10th Ave North, Onalaska, WI 54650.

1.5 Type of Mine

Construction Fill (sand, gravel, aggregate, or clay used in the construction trades).

2.0 Final destination of mined material.

Mined aggregate materials will be used for road construction projects in the County or nearby Counties.

3.0 Current Land Use:

Describe current land uses within and adjacent to the project area. Photos would be helpful in providing a view in all directions. Coordinate the photos with the description below.

The current land use within the project area is passive recreation and agriculture, and is primarily zoned AG with a small portion zoned RR2. Land adjacent to the parcel include primarily agricultural (AG) zoned parcels, with one small section to the South zoned residential (RA). Adjacent parcel use includes nonmetallic mining, agriculture, passive recreation or forested areas, with residences existing to the northwest, north, northeast, east, and south. An existing Town of Long Lake nonmetallic mine (gravel pit) is located to the north, parcel Tax ID 17797, adjacent to this property.

4.0 Permits

4.1 Reclamation Permit:

Does this mine have a current reclamation permit from Washburn County to operate?

No, the site does not have a current reclamation permit from Washburn County. This will be applied for at a later date.

4.2 Other Permits:
List other permits (county, state, federal, DNR, etc.) necessary for this project, indicate status and provide a copy (if available).

A. Washburn County Nonmetallic Mining Permit, and associated reclamation plan. Permit application to be filed at a later date.

B. Driveway (access) off Lakken Road with County or Town. Permit pending.

C. Road maintenance agreement with affected municipalities. Agreement to be drafted and executed at a later date.

D. Wisconsin Pollution Discharge Elimination System (WPDES) General Permit No. WI-0046515-07-1. Permit application to be filed at a later date.

E. Mine site registration and assigned ID with Mine Safety and Health Administration. Mine registration to be filed at a later date.

5.0 Size

5.1 Depth of Mine:
Expected maximum depth of mine (feet)? Depth is relative to what benchmark? (natural ground cover, mean sea level, road elevation, etc.)

The maximum depth of the mine will be 1241' MSL. The benchmark is relative to mean sea level and is set to maintain 15' above the underlying groundwater table and to maintain a dry pit floor.

5.2 Groundwater Level:
Groundwater level in the project area (feet). Confirmed or estimated (circle one). Depth is relative to what benchmark?

The groundwater level in the area is estimated to be between 1222' to 1226' MSL. The benchmark depth (range) is based upon well construction reports for the area.

5.3 Water Table:
Will any of the mine extend below the water table? If yes, do you intend to dewater? If yes, estimate dewatering rates in gallons per day? What impact, if any, will mine dewatering have on neighboring wells? Provide data to support any conclusions or statements made, including any monitoring well data, well construction data, and current water withdrawal rates.

The mine will not extend below the water table, and therefore no dewatering will be necessary. The mine operation plan proposes to maintain a 15' separation above the underlying groundwater table.

5.4 Total Project Area:
Specify total area (in acres) to be affected by this project. Include area for future expansion, stockpiling, processing, haul roads, settling basins, buildings, parking facilities. Show all phases for the removal of material. Give a complete description of the entire site. Use a separate sheet if necessary. Any area of extraction must be at least 50 feet from any line fence of property boundary.

Total area of the parcel is 40 acres and the proposed use will utilize approximately 24 acres for the extraction of minerals.

The proposed mining phases and extent are displayed in Appendix B. An access road from Lakken Road will enter the parcel on the southeast corner of the parcel. Here the access road will go straight west for approximately 300 feet and then gradually turns to the northwest and travels another approximate 250 feet to bring to the center of the parcel. A scale shack with scale will be located along this access road and will be monitored to ensure safety. The stockpiling and loading area will be located in this area as well. This will be the start of Phase 1. The mining operations will start in the northeast corner of Phase 1 and then gradually progress southeast, southwest and northwest. This operations description and pattern is depicted in Appendix B – Operations Plan [Phase 1] as a gradual clockwise pattern. A berm will be constructed in phase 1 with overburden along the southern edge of the parcel with maximum slopes of 3:1 within the 100 foot setback from the property line. Additional berms will be constructed, as mining progresses, to the west with maximum slopes of 3:1 within the 100 setback from the property line. These berms will reduce visibility and noise as well as maintain the aesthetics of the established greenspace of the area as well. Mining and processing equipment will be located within the exposed mine area, and moved to within each open area as mining progresses and reclamation occurs behind.

As mining advances into Phase 2, Phase 1 will have reclaimed slopes along the western and southern portions of the site. The stock piling and loading area will also migrate towards the center of the site as well. As operations continue in Phase 2, mining will progress in the southwestern portion of Phase 2 and then gradually progress north, northeast, east. This operations description and pattern is depicted in Appendix B – Operations Plan [Phase 2] as a gradual clockwise pattern. Berms will be constructed in Phase 2 with overburden along the western edge of the parcel with maximum slopes of 3:1 within the 100 foot setback from the property line. Additional berms will be constructed, as mining progresses, to the north with maximum slopes of 3:1 within the 100 foot setback from the property line.

As mining proceeds into Phase 3, Phase 2 will have reclaimed slopes along the western-northwestern portions of the site. Most of Phase 1 will be at or near the established reclaimed slopes as well as the final floor elevation. The stock piling and loading area will also migrate north in the site as well. As operations continue in Phase 3, mining will progress in the northwestern portion of Phase 3 and then gradually progress east, south and west. This operations description and pattern is depicted in Appendix B – Operations Plan [Phase 3] as a gradual clockwise pattern. Berms will be constructed in Phase 3 with overburden along the northern and eastern edges of the parcel with maximum slopes of 3:1 within the 100 foot setback from the property line. These berms will reduce visibility and noise as well as maintain the aesthetics of the established greenspace of the area as well.

As operations progress into the final stages of the site within Phase 3, reclamation will continue including reclaimed slopes along the northern-eastern portions of the site. Most of Phases 1 and 2 will be at or near the established reclaimed slopes as well as the final floor elevation. The stock piling and loading area will also shrink towards the center of the site. Upon completion of operations, reclamation will be completed within Phase 3, and all berms will have been utilized in the final reclamation. This is depicted in Appendix B – Operations Plan [Phase 4]. Final reclamation of the site is shown in Appendix B – Reclamation Plan [Phase 5].

Excavation limits follow a 100-foot setback from all property lines and public roads, 75-foot setback from any identified WDNR wetlands, and 50-foot setback from the RR2 zoned portion of the parcel. Of the 40 acres comprising all the parcel, the approximate mining extent will be 24 acres excavated at the pit.

Based on the geology and estimated resources available at the site, and typical operation history of other mine sites in the County, it is anticipated the mine may have an operational life ranging from 10 to 50 years.

6.0 Mining Operations

6.1 Brush/Vegetative Debris Disposal:

Describe the method that will be used to dispose of brush and other vegetative debris. Describe the process completely.

A stripping crew will open the site on an operational, as needed, basis. The process will include, but not limited to, bulldozers, skid steers, scrapers, haul trucks and other heavy machinery. Markable timber will be harvested and brought to market as well on an as needed basis. Brush and stumps may be ground up on site and incorporated into erosion control practices and other practical purposes.

6.2 Topsoil/Overburden:

Describe the methods that will be used to retain topsoil and all other overburden. Describe how the topsoil, subsoil, and other materials will be stored until the reclamation process takes place.

Topsoil and overburden will be reserved for berm construction on site. The berms will be constructed with a maximum slope of 3:1 within the 100' setback from property lines, adjacent to the mining area. Berms will reduce visibility and noise as well as maintain the aesthetics of the established greenspace of the area as well. The topsoil and overburden reserved in the berms will be utilized for reclamation.

6.3 Processing Methods:

Describe the processing methods that will be used at the site. Processing methods may include stockpiling and storage, blending, grading, crushing, screening and cleaning, scalping, dewatering, and dust control. If there are none, please explain why they are not necessary.

The primary operation activity will be the extraction of sand and gravel and the processing of aggregate products for construction use. The typical excavation operation sequence begins with the removal of the topsoil from the top of the sand and gravel deposit using bulldozers, a backhoe and/or scrapers and haul trucks. After the sand and gravel is exposed, the sand and gravel is then excavated from the bank and hauled by end-loaders or trucks a short distance to the crushing and screening plant where the sand and gravel is crushed and sized into various products. The crushing and screening plant typically includes several crushing units, screening units, and conveyors. The crushing and screening plants utilized are portable and are moved within the excavation area and in and out of the pit as needed to replenish the product stockpiles. There will be no washing of the sand and gravel. Dust suppression systems are installed on all Milestone Materials crushing equipment and utilize water as a form of dust suppression mitigation.

After processing by the crushing and screening plant, the various products are stockpiled for later use. End-loaders are used to load the aggregate products into trucks from the stockpiles. The trucks are then weighed on a scale before leaving the site.

Occasionally, as recycle products become available, recycled concrete may be hauled to the pit for temporary storage and processing into aggregate products for resale. None of the recycle materials will be buried on site and all of the recycle materials will be temporarily stockpiled and hauled from the site after processing.

6.4 Extraction Methods:
Describe the method of extraction (shovel and truck, front-end loader and truck, hydraulic dredge, dragline and truck, self loading scraper, other).

The typical excavation operation sequence begins with the removal of the topsoil from the top of the sand and gravel deposit using bulldozers, a backhoe and/or scrapers and haul trucks. After the sand and gravel is exposed, the sand and gravel is then excavated from the bank and hauled by end-loaders or trucks.

6.5 Use of Explosives:
Will explosives be used? If yes, specify the types and methods of explosives used and describe what precautions will be used to prevent physical hazards to persons and neighboring property from flying debris, excessing air blasts, or ground vibrations. Depending on the mine's location to nearby structures, more detailed information may be required on the blasting program (such as third party blasting study).

Explosives will not be used for this extraction only operation.

6.6 Water Use:
Will water be used at the site? Water may be necessary for processing and also to keep dust under control at the pit site and haul road, if present. If yes, describe the volume of water needed, the source of the water, and any run off control measures (if needed).

Water will not be used for the processing (washing) of the sand and gravel. Water will be used for dust suppression systems installed on all Milestone Materials crushing equipment, and by onsite water trucks. Volume of water used on dust suppression systems vary by operation and material. Water is brought into the site by water trucks operated by Milestone Materials or other vendors as appropriate to maintain sufficient water supply in storage tank(s) on site.

6.7 Dust Control:
Describe the methods used to control dust at the site. This includes mining processes, on haul roads, and while transporting to final destination. Be as complete as possible.

Dust suppression systems are installed on all Milestone Materials crushing equipment and utilize water as a form of dust suppression mitigation. Volume of water used on dust suppression systems vary by operation and material. The haul road will be watered and/or treated, as needed, but factors that determine the frequency of watering and/or treating are weather factors (ex. raining).

6.8 Chemical Storage:
Will fuel tanks, solvents, explosives, or other chemicals be stored on site? If yes, describe these materials and how they will be secured, stored, and method of containment. Indicate locations of storage facilities on mine map(s).

A fuel tank will be brought in to service the operational equipment, or a fueling company will be utilized. Basic maintenance items will be on site in the job trailers including but not limited to LP tanks (ex. 20lb LP tanks), welding shielding gas tanks, lubricants and other basic chemicals for operating and maintaining a sand and gravel processing operation. All items will have lock-out devices and be stored either in a tool trailer or appropriate containment trailers. Fuel tanks will be either double-walled tanks or within an appropriate secondary containment.

6.9 Structures:
Will any structures need to be established on site. This includes any storage shed, portable toilet, employee facility, etc. If yes, specify the number, type, and location.

Structures that will be located in the operational area include a mobile scale house and office, and portable toilet(s). Transient tool and job trailers will be located on the site on an as needed basis.

6.10 Employees and Facilities:
Identify the number of employees expected to work at the site and the facilities that will be provided.

The sand and gravel operation will have a foreman and 1-5 employees on site. Portable toilet(s) and basic accommodations (ex. office / scale house) will be located on site.

6.11 Operation Schedule:
Hours / days of operation (including maintenance).

Activity at the pit will normally occur during the construction season (March to November). However, reduced operations may occur December through February, as supply and demand for sand and gravel aggregate products warrant. The duration and frequency of activity in the pit is dependent upon construction project work in the area. Hours of operation at the pit are proposed to be 6:00am – 8:00pm Monday through Friday, with general quiet maintenance outside of that schedule.

6.12 Life of Mine:
Length of time the mine is to remain operational.

The mine is projected to remain operational for a period of approximately 10-50 years.

7.0 Trucking Operations

7.1 Loads/Hours:
How many loads per day, hours trucks will operate.

Activity at the pit will normally occur during the construction season (March to November). However, reduced operations may occur December through February, as supply and demand for sand and gravel aggregate products warrant. The duration and frequency of activity in the pit is dependent upon construction project work in the area. Hours of operation at the pit are proposed to be 6:00am – 8:00pm Monday through Friday, with

general quiet maintenance outside of that schedule. General hauling hours* will match the operation hours of the mine or as approved by the county committee.
* Public works projects which require night time hauling would be done in conjunction with Wisconsin Act 12 2023 Section 66.0441(3)(c).

7.2 Weight per load:

The weight per load will vary, but is approximately 22 tons.

7.3 Type of truck:

Types of truck will vary depending on the customer, but will most likely include quad axel dump trucks.

7.4 Road Use:

Which township and county roads will be used to transport material? Please provide a complete description of all roads to be used to transport and to return to the site. Performance bonds may be necessary for the repair and/or restoration of any township road affected in an adverse way. What specific contributions will be taken to insure that the township roads will be maintained to a safe and secure condition?

Loaded haul route will be a right turn out of the pit access road, south on Lakken Road and then travel east to County Road M. A road use maintenance agreement for Lakken Road and the eastern portion of 30th Avenue will be established and implemented with the appropriate municipalities upon final approval of all required permits.

8.0 Environmental

8.1 Resources Impacted:

List resources that may be impacted by this project such as timber, agriculture, surface water, ground water, air quality, noise pollution, and plant, wildlife or fish habitiat. Describe measures that will be taken to mitigate those impacts.

Markable timber will be harvested and brought to market as well on an as needed basis. Brush and stumps may be ground up on site and incorporated into erosion control practices and other practical purposes.

No surface water or groundwater impacts are expected. A groundwater separation distance of 15’ will maintain adequate groundwater separation. Stormwater will be managed on site with no proposed discharge offsite.

Air quality will be preserved by use of dust suppression systems on the operation equipment as well as watering and/or treating the haul roads.

Topsoil and overburden will be reserved for berm construction on site. The berms will be constructed with a maximum slopes of 3:1 within the 100’ setback from property lines. Berms will reduce visibility and noise as well as maintain the aesthetics of the established greenspace of the area as well.

Noise will be mitigated on the site by maintaining functional mufflers and exhaust systems on all internal combustion engines and by shielding mechanical processes with noise barriers. Based on noise studies conducted by Milestone Materials, aggregate production operations such as crushing have an originating decibel (db) level of around 100. The level

drops down to 80-85 within the first 100 feet. After 200 feet, the level is around 70-75. After 400 feet, it is generally less than 70. Normal conversations register in the 60-70 db range.

8.2 Endangered Species:
Are there any known endangered species on or near the mine site? If yes, describe the species and whether an environmental impact statement will need to be prepared?

The Lakken Ridge Pit property is located in the Forest Transition as indicated from the Wisconsin Department of Natural Resources [1]. According to the Wisconsin DNR publication, trees in this area may consist of northern and lowland hardwoods, along with aspen - birch, oak – hickory hardwoods and conifers, and minimal spruce-fir and northern white-cedar. Anticipated wildlife in the area may consist of the white-tailed deer, American beaver, ruffed grouse, fox, coyote, river otter, wild turkey, racoon, possum, black bear, skunk, wolf, cardinal, robin, blue jay, and the (reintroduced) gray wolf.

An Endangered Resources Preliminary Assessment was conducted using the Wisconsin DNR's natural heritage inventory, and results did not indicate any known endangered species on or near the mine site requiring action.

8.3 Acid Producing Minerals/Soils:
Are there any known acid producing minerals or soils present? If yes, how will acid water pollution from the excavation, stockpiling, and waste areas be controlled?

No, we are not aware of appreciable acid producing minerals or soils present at the site.

8.4 Well Monitoring:
What is the schedule and method for well monitoring within a ¼ mile of the mine's boundaries before, during and after the mine is opened, worked, and reclaimed? Monitoring distance may need to be increased if the mine depth is near the water table, dewater is used, or explosives are used.

The groundwater monitoring wells proposed to be installed on site will be water table observation wells constructed and developed in general accordance with Wisconsin Administrative Code Chapter NR 141 requirements; reference Figure 9. The monitoring wells will be installed before the commencement of mining at the site. Water table monitoring observations will be conducted annually, or as approved by county officials.

The wells will be 2-inch, minimum-schedule-40 PVC. The wells will have 15' slotted screens which will extend from approximately 10' below to 5' above the water table. The wells will have a clean sand filter pack extending from approximately 2' below to 2' above the screened interval. Approximately 2' of clean fine sand will be placed on top of filter packs. A minimum of 2' of bentonite chips will be placed on top of the fine sand. Bentonite or grout may seal the rest of the annular space up to 5' below the ground surface. The upper 5' surface seal may be bentonite or concrete. The wells will have locking 4" steel protective cover pipes extending approximately 3' above ground.

[1] Wisconsin Department of Natural Resources. 2015. The ecological landscapes of Wisconsin: An assessment of ecological resources and a guide to planning sustainable management. Chapter 11, Forest Transition Ecological Landscape. Wisconsin Department of Natural Resources, PUB-SS-1131M 2015, Madison.

8.5 Erosion Control Practices:

Describe erosion control practices that will be used during mining. If no measures will be used, explain why none are needed.

Erosion control practices will be implemented at the site. These practices include, but not limited to, silt fence, sediment logs, hydro-seeding, blown straw, erosion matting and other forms of erosion control. The site will be minimally exposed only to adequately extract and process the material.

8.6 Operations Screening:

Describe measures that will be taken to screen the operation from view of surrounding land uses or an explanation of why such measures are not needed. If they are not needed, please include photos of the area (aerial or ground level). Please show the areas affected on a plat.

Topsoil and overburden will be reserved for berm construction on site. The berms will be constructed with a maximum slopes of 3:1 within the 100' setback from property lines. Berms will reduce visibility and noise as well as maintain the aesthetics of the established greenspace of the area as well.

9.0 Reclamation

9.1 Progressive Reclamation:

Describe progressive reclamation activities that will occur over the life of the operation. Be complete in the description. If necessary show the reclamation in the various phases.

Total area of the parcel is 40 acres and the proposed use will utilize approximately 24 acres for extraction of minerals.

The proposed mining phases and extent are displayed in Appendix B. An access road from Lakken Road will enter the parcel on the southeast corner of the parcel. Here the access road will go straight west for approximately 300 feet and then gradually turns to the northwest and travels another approximate 250 feet to bring to the center of the parcel. A scale shack with scale will be located along this access road and will be monitored to ensure safety. The stockpiling and loading area will be located in this area as well. This will be the start of Phase 1. The mining operations will start in the northeast corner of Phase 1 and then gradually progress southeast, southwest and northwest. This operations description and pattern is depicted in Appendix B – Operations Plan [Phase 1] as a gradual clockwise pattern. A berm will be constructed in phase 1 with overburden along the southern edge of the parcel with maximum slopes of 3:1 within the 100 foot setback from the property line. Additional berms will be constructed, as mining progresses, to the west with maximum slopes of 3:1 within the 100 setback from the property line. These berms will reduce visibility and noise as well as maintain the aesthetics of the established greenspace of the area as well. Mining and processing equipment will be located within the exposed mine area, and moved to within each open area as mining progresses and reclamation occurs behind.

As mining advances into Phase 2, Phase 1 will have reclaimed slopes along the western and southern portions of the site. The stock piling and loading area will also migrate towards the center of the site as well. As operations continue in Phase 2, mining will progress in the southwestern portion of Phase 2 and then gradually progress north, northeast, east. This

operations description and pattern is depicted in Appendix B – Operations Plan [Phase 2] as a gradual clockwise pattern. Berms will be constructed in Phase 2 with overburden along the western edge of the parcel with maximum slopes of 3:1 within the 100 foot setback from the property line. Additional berms will be constructed, as mining progresses, to the north with maximum slopes of 3:1 within the 100 foot setback from the property line.

As mining proceeds into Phase 3, Phase 2 will have reclaimed slopes along the western-northwestern portions of the site. Most of Phase 1 will be at or near the established reclaimed slopes as well as the final floor elevation. The stock piling and loading area will also migrate north in the site as well. As operations continue in Phase 3, mining will progress in the northwestern portion of Phase 3 and then gradually progress east, south and west. This operations description and pattern is depicted in Appendix B – Operations Plan [Phase 3] as a gradual clockwise pattern. Berms will be constructed in Phase 3 with overburden along the northern and eastern edges of the parcel with maximum slopes of 3:1 within the 100 foot setback from the property line. These berms will reduce visibility and noise as well as maintain the aesthetics of the established greenspace of the area as well.

As operations progress into the final stages of the site within Phase 3, reclamation will continue including reclaimed slopes along the northern-eastern portions of the site. Most of Phases 1 and 2 will be at or near the established reclaimed slopes as well as the final floor elevation. The stock piling and loading area will also shrink towards the center of the site. Upon completion of operations, reclamation will be completed within Phase 3, and all berms will have been utilized in the final reclamation. This is depicted in Appendix B – Operations Plan [Phase 4]. Final reclamation of the site is shown in Appendix B – Reclamation Plan [Phase 5].

Excavation limits follow a 100-foot setback from all property lines and public roads, 75-foot setback from any identified WDNR wetlands, and 50-foot setback from the RR2 zoned portion of the parcel. Of the 40 acres comprising all the parcel, the approximate mining extent will be 24 acres excavated at the pit.

Based on the geology and estimated resources available at the site, and typical operation history of other mine sites in the County, it is anticipated the mine may have an operational life ranging from 10 to 50 years.

9.2 Water Bodies:
Is an excavated / impounded body of water to be left as part of the reclamation? If yes, will it be secured to prevent unauthorized access by the public? If yes, will it be stocked with fish; and, if yes, what species?

The site will be returned to passive recreation, and is not currently planned to have an excavated/impounded body of water to remain as part of reclamation.

9.3 Seasonal Slope and Erosion Stabilization:
Describe the methods that will be used at the cessation of seasonal operations to stabilize slopes from erosion. This includes both wind and water erosion. Be complete in your description.

Erosion control practices will be implemented at the site. These practices include, but not limited to, silt fence, sediment logs, hydro-seeding, blown straw, erosion matting and other

forms of erosion control. The site will be minimally exposed only to adequately extract and process the material.

9.4 Inactivity:
Will the site become inactive during the current operations for an unspecified period of time? If yes, describe the interim reclamation methods that will be used.

Yes, reduced operations may occur December through February, as supply and demand for sand and gravel aggregate products warrant. The duration and frequency of activity in the pit is dependent upon construction project work in the area. Interim reclamation is not currently considered for those short periods of time; rather, progressive reclamation will occur as described in section 9.1.

9.5 Proposed Reclamation:
Describe proposed reclamation including final slopes, high wall reduction, benching, terracing, and other structural slope stabilization measures.

The final reclamation will be a passive recreation with maximum 3:1 slopes. There will be no highwalls, and benching/terracing will be performed as needed. A final reclamation plan will be provided to the County at the time a nonmetallic mining permit is applied for.

9.6 Reclamation Features:
Describe anticipated topography, water impoundments, artificial lakes, and future land use of the site. This should be based upon the entire proposed site. It should include a detailed description of the process.

The final reclamation will be a passive recreation with maximum 3:1 slopes. The reclaimed site is not currently planned to have an excavated/impounded body of water to remain as part of reclamation. Anticipated final topography is displayed in Appendix B – Reclamation Plan [Phase 5].

9.7 Disposition of Facilities:
Describe plans for the disposition of surface structures, haul roads, and related facilities after completion of mining.

All facilities will be removed (ex. scale house/ office) and a portion of the access road will be left to accommodate the entry into the property.

9.8 Oversize and Undersized Materials:
Describe the methods proposed for the disposal or reclamation of oversize and undersized materials. If returned to the site, how will be incorporated into the reclamation process.

Oversize materials will be broken down into marketable materials. Undersized materials will be used in reclamation, berm creation, or sold if there is a market for the material.

9.9 Seeding Plan:
Describe or attach a copy of a seeding plan that includes methods of seed bed preparation, seed mixtures, seeding rates, mulching, and other techniques needed to accomplish site stabilization.

All sloped areas at this site will be revegetated upon completion of mining activities. Seedbed preparation will consist of using a disc and rake. The topsoil and subsoil will be

seeded at a rate 130# / acre immediately following interim or permanent reclamation. The seed mix will be a #20 from the 2024 Wisconsin Department of Transportation Standard Specifications for Highway and Structure Construction manual which consists of 6% Kentucky Bluegrass, 15% Red Fescue, 24% Hard Fescue, 40% Tall Fescue, and 15% Perennial Ryegrass. Fertilizer will be applied at 300# / acre and mulching will be applied at 2 ton / acre if needed. The interim and permanently reclaimed areas will be seeded with temporary seeding. Oats will be used in spring and summer, and winter wheat or rye will be used in fall plantings after September 1st. The soil will be fertilized as indicated by soil tests, using commercial fertilizer and/or other amendments.

9.10 Long Term Maintenance:
Describe long term maintenance needed to support reclamation (as per the amended ordinance).

Areas that need to further maintenance will be addressed as soon as practically and seasonally possible. Final reclamation will need to be signed off by Washburn County and financial assurance will be on file with the County.

9.11 Reclamation Cost:
Provide an estimate of the reclamation cost of each phase of the project or the entire site if phasing is not planned.

A final reclamation plan will be provided to the County at the time a nonmetallic mining permit is applied for and will contain the reclamation cost estimate. An estimate of the reclamation cost for the total 24 acres disturbed is currently estimated at $4,532.20 per acre. Final reclamation will need to be signed off by Washburn County and financial assurance will be on file with the County.

Lakken Ridge	**24 Acres**			
Item	**Units**	**Quantity**	**Cost/Unit**	**Total Cost**
Erosion Control	Lump Sum/Acre	24.0	171.09	$4,106.16
Redistribution of Overburden/ 3:1 Sloping/ Highwall Reduction	CY	38,720	2.00	$77,440.00
Redistribution of Topsoil	CY	1,613	2.00	$3,226.67
Seedbed Prep., Fertilize, Seed, Mulch	Lump Sum/Acre	24.0	1,000	$24,000.00
Total Reclamation Cost for 29 Acres	--	**--**	**--**	**$108,772.83**
Reclamation Cost Per Acre	--	**24.00**	**$ 4,532.20**	**--**