



## **Westres Quarry Conditional Use Permit -Addendum-**

### **Natural Features and Depth to Groundwater**

#### ***Vegetation and Plant Communities***

The current vegetation on and surrounding the Westres Quarry includes crop land, pasture grasses, and trees such as honey suckle, cedar, and box elder.

#### ***Wildlife***

The wooded area and agricultural land on and adjacent to the Westres Quarry support wildlife such as white-tailed deer, coyotes, raccoons, nesting birds, and other wildlife commonly found in western Dane County.

#### ***Hydrogeological Conditions***

Based on well logs from neighboring properties, the anticipated groundwater level beneath the Westres Quarry fluctuates between the elevations of 815 feet and 845 feet. Since no mineral extraction will occur beneath an elevation of 920 feet, the groundwater table will be provided with a minimum buffer of 75 feet in thickness that is predominantly made up of the Jordan Sandstone Formation.

### **Material Extracted**

Dolomite with limestone will be the material extracted from the Westres Quarry.

The amount of limestone extracted per year varies based on market demand for construction aggregate. Since 2010, the average amount of material removed from the Westres Quarry is approximately 35,000 tons per year.

### **Geological Composition**

Three main geologic formations are prevalent within and surrounding the Westres Quarry, as illustrated on Exhibit 1 included with this Addendum. The Prairie du Chien Group exists at the highest elevations of the site, and is composed mainly of dolomite. Beneath the Prairie du Chien Group are two formations in the Trempealeau Group. The two stratigraphic units that make up the Trempealeau Group are the Jordan and St. Lawrence Formations. The groundwater table is typically around 835' elevation at this site, which is near the contact between the Jordan Sandstone and the underlying St. Lawrence Formation. According to *Macrostrat.org*, the Jordan Formation is primarily composed of quartzose sandstone and the underlying St. Lawrence Formation is made up of siltstone. Underneath the Trempealeau Group is the Tunnel City Group, which is where the Lone Rock Formation becomes present. This formation is primarily composed of shale and feldspathic sandstone.

At its peak, the elevation at the Westres Quarry ranges between is between 1030' to 1040' located on the eastern side of the site. This elevation descends traveling from east to west, and at the western boarder of the proposed CUP boundary, the elevation has a relatively wide range between 890' to 970'. The proposed elevation of the quarry floor will be 920'.

### **Haul Routes and Traffic Flow Patterns**

The access road for the Westres Quarry terminates onto State Highway 78. State Highway 78 travels north and south at the junction of the access road to the Westres Quarry, and dump trucks are allowed to travel north or south both when entering the site empty or exiting the site loaded. The traffic flow pattern of dump trucks is illustrated on Exhibit 2 included with this Addendum.

### **Asphalt and Concrete Mixing**

No asphalt or concrete batch plants are being proposed in conjunction with this CUP request for mineral extraction at the Westres Quarry.

### **Structures**

There will be no structures associated with the Westres Quarry. All the equipment used to mine and manufacture the limestone on the site is portable, and will typically be at the site for a period of two to three weeks to produce the construction aggregate that will be stockpiled at the Westres Quarry.

A truck scale and accompanying scale house is located on parcel 0706-022-9503-0 immediately west of the proposed CUP boundary. This parcel is also owned by Westres Quarry, LLC, and the parcel is zoned heavy commercial.

### **Equipment Storage**

As mentioned in the "Structures" section above, all equipment at the Westres Quarry will be portable. When it is on site, the exact location of the equipment will vary, but it will typically be set up in close proximity to the limestone shot rock that was most recently drilled and blasted.

### **Zoning Districts**

Zoning District Boundaries are displayed on Exhibit 3 included with this Addendum.

### **Current Topography**

The existing contours of the Westres Quarry are illustrated on the Reclamation Plan in Exhibit 4 included with this Addendum.

### **Existing Natural Features**

The existing natural features are displayed on the Westres Quarry Hydrogeological Map in Exhibit 5 included with this Addendum.

### **Driveway/Access Road and Scale Location**

The driveway to access the Westres Quarry is displayed on the Operational Plan in Exhibit 6 included with this Addendum. The location of the truck scale is also displayed on the Operational Plan.

### **Legal Description of Site**

The legal description of the Westres Site is included in Exhibit 7 of this Addendum.

# **Exhibit 1**

## **Geological Map**



## WESTRES QUARRY GEOLOGIC MAP



**Name: Prairie du Chien Group (Op)**

**Age:** Ordovician (485.4 - 443.8Ma)

**Stratigraphic name(s):** Prairie du Chien Group

**Description:** Dolomite, minor sandstone, cherty dolomite; vuggy, sandy, and oolitic. Consists of two formations, the Shakopee and the Oneota. It varies in thickness from 145 feet (44 m) in eastern Dane County to 220 feet (67 m) in western Dane County.

**Name: Trempealeau Group (Ct)**

**Age:** Cambrian (541 - 485.4Ma)

**Stratigraphic name(s):** Jordan Formation; St. Lawrence Formation

**Description:** Quartz sandstone, dolomitic siltstone, silty dolomite, and sandy dolomite. Consists of two formations, the Jordan and the underlying St. Lawrence, which were combined as one mapping unit. Thickness is about 75 feet (23 m) where not eroded.

**Name: Tunnel City Group (Ctc)**

**Age:** Cambrian (541 - 485.4Ma)

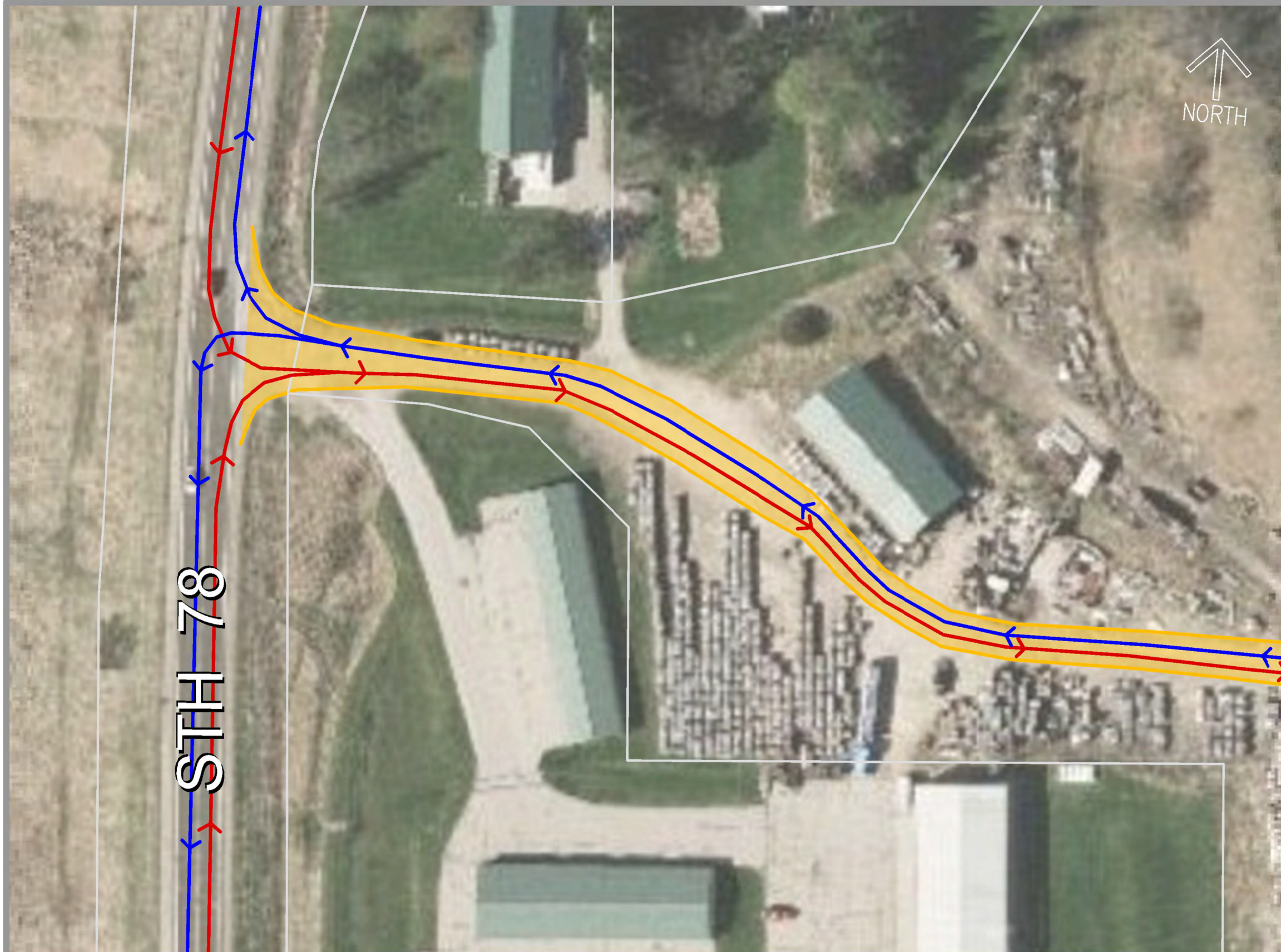
**Stratigraphic name(s):** Lone Rock Formation; Mazomanie Formation

**Description:** Medium to very fine-grained quartz sandstone, locally very glauconitic. Up to 150 feet (46 m) thick. Lone Rock Formation: very fine shaly and glauconitic, feldspathic sandstone. Mazomanie Formation: fine to medium grained, and not glauconitic.

## **Exhibit 2**

# **Traffic Flow Patterns**








**Yahara Materials Inc.**  
 6117 County Trunk K  
 Waunakee WI 53597  
 (608) 849-4162

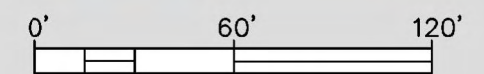
## Westres Quarry

*Traffic Pattern Map*  
 August 7th, 2020

-  Access Road
-  Incoming Truck Traffic
-  Outgoing Truck Traffic



Town: Vermont  
 T.07 N. R.06 E.

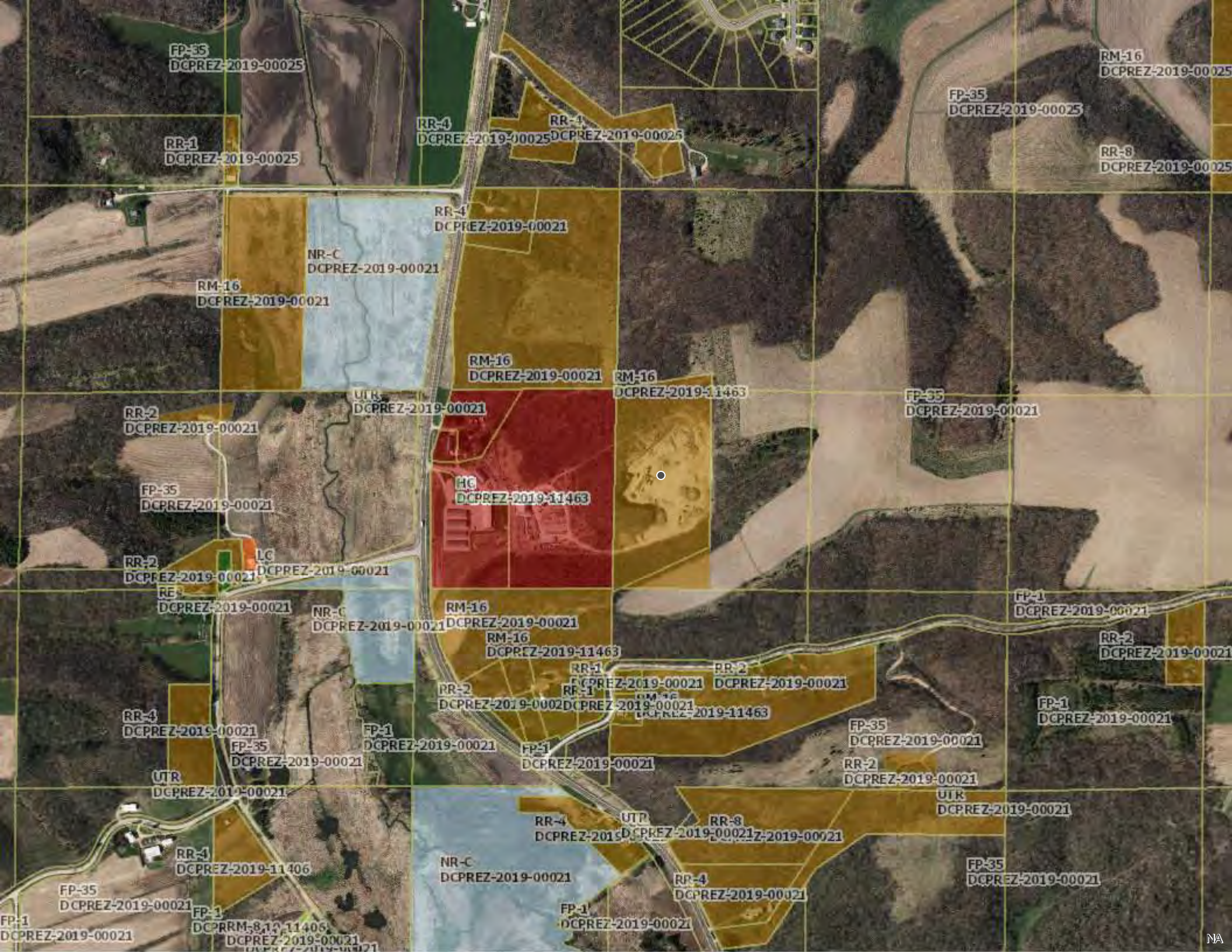


SCALE: 1" = 60'  
 2017 Aerial Photo

## **Exhibit 3**

# **Zoning District Boundaries**





FP-35  
DCPREZ-2019-00025

RM-16  
DCPREZ-2019-00025

RR-1  
DCPREZ-2019-00025

RR-4  
DCPREZ-2019-00025

RR-4  
DCPREZ-2019-00025

FP-35  
DCPREZ-2019-00025

RR-8  
DCPREZ-2019-00025

RR-4  
DCPREZ-2019-00021

NR-C  
DCPREZ-2019-00021

RM-16  
DCPREZ-2019-00021

RM-16  
DCPREZ-2019-00021

RM-16  
DCPREZ-2019-11463

UTR  
DCPREZ-2019-00021

FP-35  
DCPREZ-2019-00021

RR-2  
DCPREZ-2019-00021

HC  
DCPREZ-2019-11463

FP-35  
DCPREZ-2019-00021

RR-2  
DCPREZ-2019-00021

LC  
DCPREZ-2019-00021

RE  
DCPREZ-2019-00021

NR-C  
DCPREZ-2019-00021

RM-16  
DCPREZ-2019-00021

FP-1  
DCPREZ-2019-00021

RM-16  
DCPREZ-2019-11463

RR-2  
DCPREZ-2019-00021

RR-1  
DCPREZ-2019-00021

RR-2  
DCPREZ-2019-00021

RR-2  
DCPREZ-2019-00021

RR-1  
DCPREZ-2019-00021

RR-1  
DCPREZ-2019-11463

FP-1  
DCPREZ-2019-00021

RR-4  
DCPREZ-2019-00021

FP-1  
DCPREZ-2019-00021

FP-1  
DCPREZ-2019-00021

FP-35  
DCPREZ-2019-00021

RR-2  
DCPREZ-2019-00021

UTR  
DCPREZ-2019-00021

RR-4  
DCPREZ-2019-00021

UTR  
DCPREZ-2019-00021

RR-8  
DCPREZ-2019-00021

UTR  
DCPREZ-2019-00021

RR-1  
DCPREZ-2019-11406

NR-C  
DCPREZ-2019-00021

RR-4  
DCPREZ-2019-00021

FP-35  
DCPREZ-2019-00021

FP-35  
DCPREZ-2019-00021

FP-1  
DCPREZ-2019-11406

FP-1  
DCPREZ-2019-00021

FP-1  
DCPREZ-2019-00021

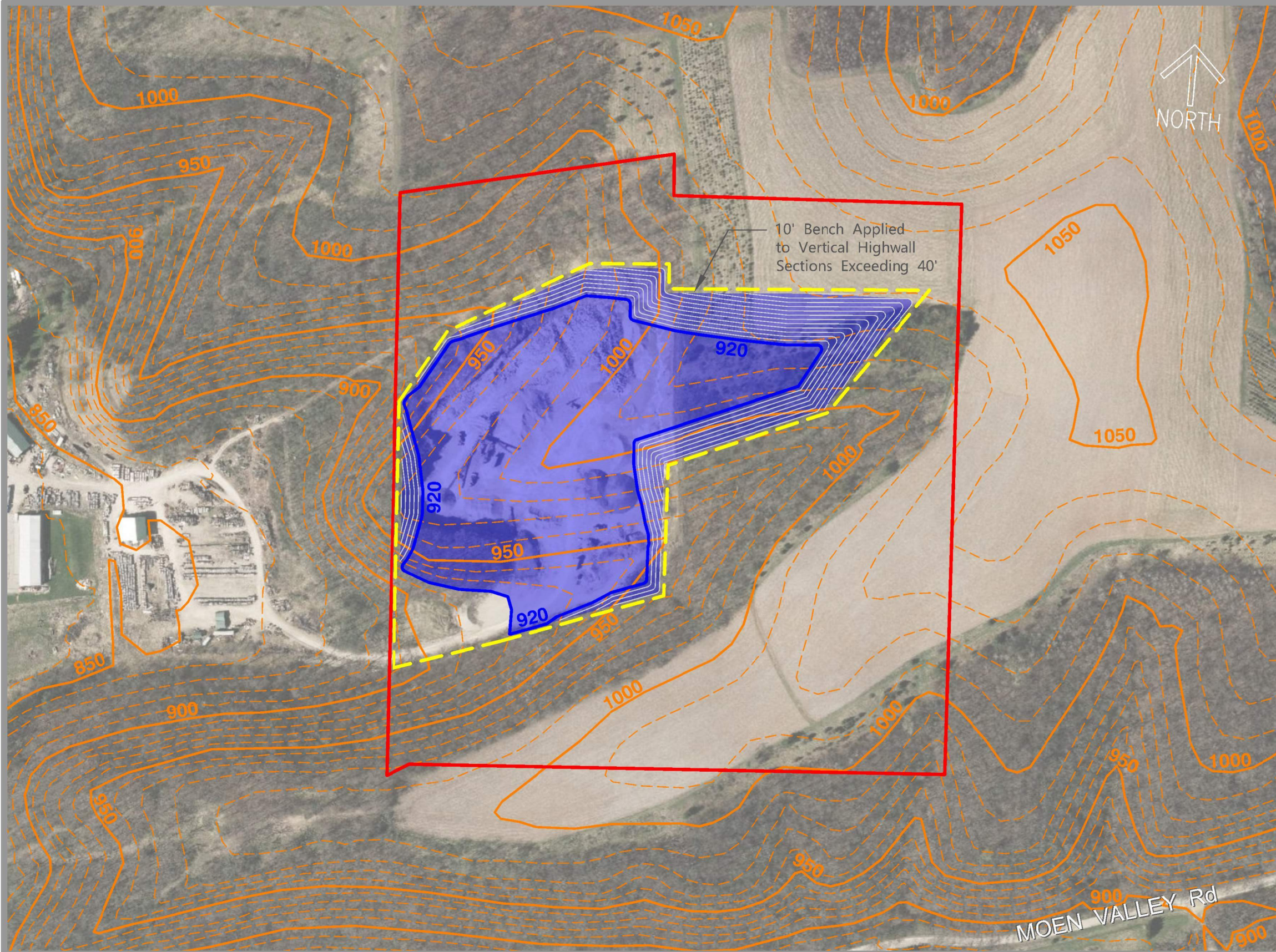
RR-8, 11406  
DCPREZ-2019-00021



## **Exhibit 4**

### **Existing Contour Lines**








**Yahara Materials Inc.**  
 6117 County Trunk K  
 Waunakee WI 53597  
 (608) 849-4162

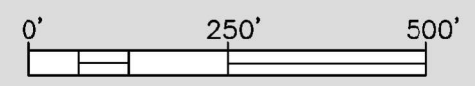
## Westres Quarry

*Reclamation Plan*  
 June 3rd, 2020

-  Property Boundary
-  CUP Boundary - 15.1 Acres
-  10' Contours Before Mining
-  Quarry Floor Footprint 13.8 Acres
-  Quarry Floor Contour (~920' Elevation)
-  10' Vertical Highwall Contours



Town: Vermont  
 T.07 N. R.06 E.



SCALE: 1" = 250'  
 2017 Aerial Photo



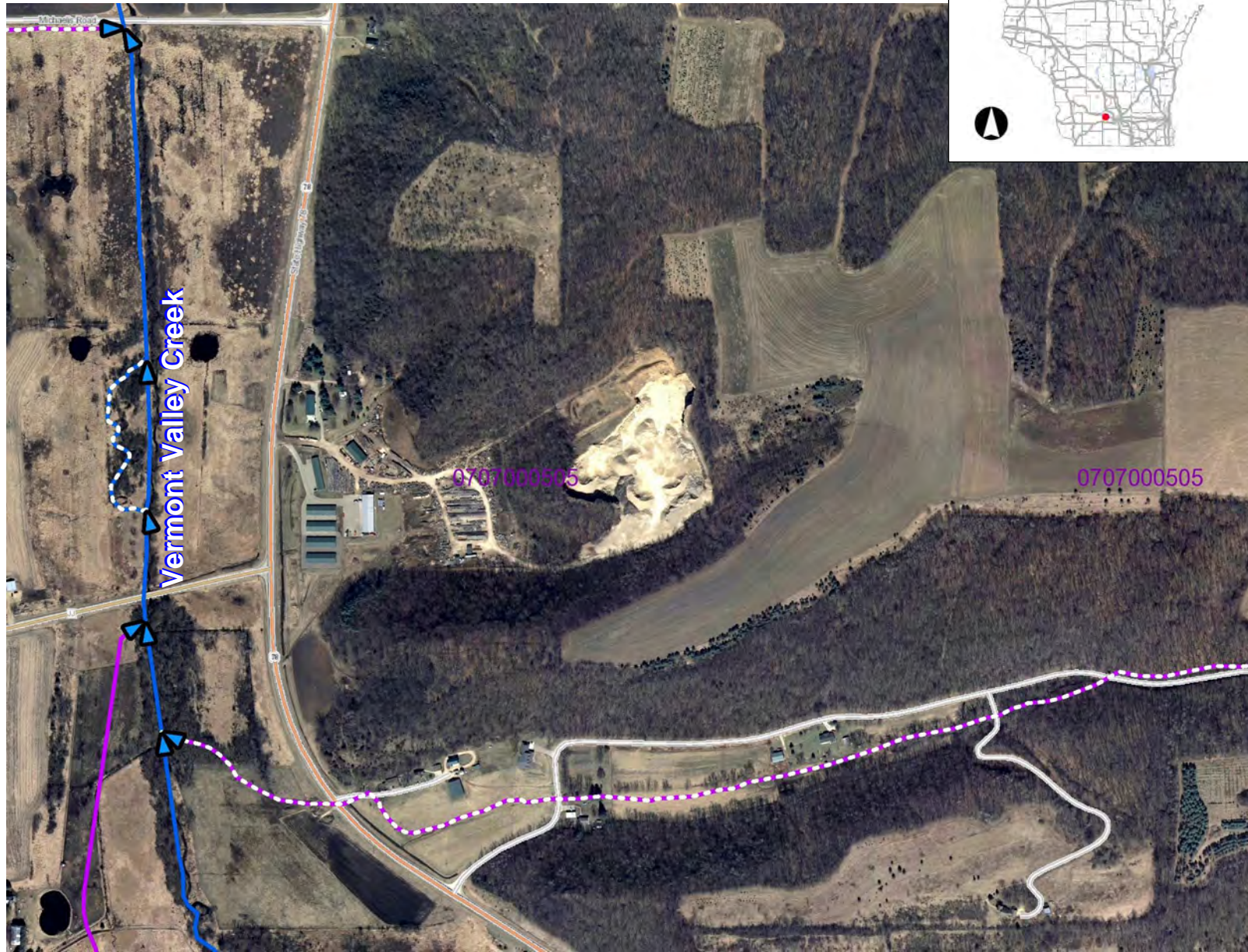
## **Exhibit 5**

### **Natural Features**





# Westres Quarry Hydrogeological Map



**Legend**

- 24K Hydrography Flow Direction
- Stream Order**
  - 1st Order
  - 2nd Order
  - 3rd Order
  - 4th Order
  - 5th Order
  - 6th Order
  - 7th Order
  - 8th Order
  - 9th Order
- 10-digit HUCs (Watersheds)
- Municipality
- State Boundaries
- County Boundaries
- Major Roads**
  - Interstate Highway
  - State Highway
  - US Highway
- County and Local Roads**
  - County HWY
  - Local Road
- Railroads
- Tribal Lands
- Rivers and Streams
- Intermittent Streams
- Lakes and Open water
- Index to EN\_Image\_Basemap\_Leaf\_Off

**Notes**

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: <http://dnr.wi.gov/legal/>



NAD\_1983\_HARN\_Wisconsin\_TM

1: 7,920

## **Exhibit 6**

# **Operational Plan**





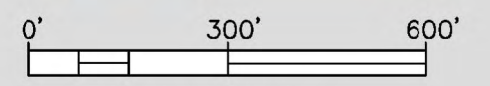
**Yahara Materials Inc.**  
 6117 County Trunk K  
 Waunakee WI 53597  
 (608) 849-4162

**Westres Quarry**  
*Operational Plan*  
 August 7th, 2020

-  Property Boundary
-  CUP Boundary - 15.1 Acres
-  Active Area - 9.8 Acres
-  Access Road
-  Tracking Pad
-  Topsoil & Spoils Stockpile Area
-  Existing Fencing
-  Proposed Fencing (Installed Upon CUP Approval)
-  Locked & Gated Entrance to Site
-  Scale & Scale House



Town: Vermont  
 T.07 N. R.06 E.



SCALE: 1" = 300'  
 2017 Aerial Photo



## **Exhibit 7**

### **Legal Description of Site**



# WILLIAMSON SURVEYING & ASSOCIATES, LLC

104A WEST MAIN STREET, WAUNAKEE, WI 53597

NOA T. PRIEVE and CHRIS W. ADAMS

PHONE: 1-608-255-5705 WEB: WILLIAMSONSURVEYING.COM

## 15.1 Acre CUP boundary

A parcel of land located in part of the NW  $\frac{1}{4}$  of the SE  $\frac{1}{4}$  the SW  $\frac{1}{4}$  of the NE  $\frac{1}{4}$  and the NW  $\frac{1}{4}$  of the NE  $\frac{1}{4}$  all in section 2, T7N, R6E, Town of Vermont, Dane County, Wisconsin being more particularly described as:

Commencing at the North  $\frac{1}{4}$  corner of said section 2; thence S  $00^{\circ}37'29''$  W along the north-south quarter section line, 1843.13 feet to the point of beginning.

Thence N  $29^{\circ}11'09''$  E 149.82 feet; thence N  $62^{\circ}20'59''$  E, 441.61 feet; thence N  $89^{\circ}35'32''$  E, 180.00 feet; thence S  $00^{\circ}24'28''$  E, 75.00 feet; thence N  $89^{\circ}35'32''$  E, 622.29 feet; thence S  $39^{\circ}19'47''$  W, 395.45 feet; thence S  $70^{\circ}37'51''$  W, 390.68 feet; thence S  $00^{\circ}24'28''$  E, 175.00 feet; thence S  $64^{\circ}17'31''$  W, 728.37 feet to a point on said north-south quarter line; thence along the north-south quarter line N  $00^{\circ}37'29''$  E, 660.00 feet to the point of beginning. Said parcel contains 657868 sq.ft. or 15.10 acres.