TO:

Redwood County Planning Commission

FROM:

Jeanette Pidde

Land Use and Zoning Supervisor

Redwood County Environmental Office

DATE:

July 23, 2024

RE:

Planning Commission Hearing on July 30, 2024

A meeting of the Redwood County Planning Commission has been scheduled for Tuesday, the 30th day of July, 2024, beginning at 1:00 p.m. in the Board Room of the Redwood County Government Center, 403 South Mill Street, Redwood Falls, MN 56283.

The meeting will involve two (2) public hearings. A brief summary of the subject matter of the hearings is set forth below.

1. Public hearing on Animal Confinement Feedlot Conditional Use Permit Application (7-24) submitted by Kyle Prechel

Kyle Prechel is seeking to operate a 744-animal unit cattle operation the East Half of the Northwest Quarter of Section 21 of Willow Lake Township. The feedlot would consist of four barns and three open lots to house 125 cow/calf pairs, 70 feeder cattle, and 545 fat cattle.

The site is located in the "A" Agricultural District. A feedlot over 300 animal units is a conditional use in said District.

The current feedlot is under 300 animal units. There are three existing barns and two open lots on the property, and Prechel proposes to add one 50'x336' barn, one 50'x200' holding pen, a 32'x50' processing facility, and two manure bays to the existing operation.

The nearest county open ditch is 1,575 feet north of the site, and the nearest county tile line is 1,375 feet northwest of the site. Willow Lake is 4,000 feet west of the site.

The three closest residential dwellings to the site, other than the landowner, are as follows: Shelly and Shawn Willhite, 30479 County Hwy 4, about 1,900' north of the site; David Eichten, 18444 Knox Ave., about 2,100' southeast of the site; and Dale and Marlene Jenniges, 29844 County Hwy 4, about 2,575' southwest of the site.

Redwood County Code of Ordinances requires feedlots to meet or exceed a 93% annoyance free rating on the University of Minnesota Odor OFFSET model.

The ratings for the proposed feedlot to the nearest residences are as follows:

- (1) 30479 County Hwy 4 97%
- (2) 18444 Knox Ave. 98%
- (3) 29844 County Hwy 4 98%

A copy of the Conditional Use Permit application, maps, plans, and proposed permit conditions are enclosed.

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2. Continuation of Public hearing on Application for Extraction Interim Use Permit (6-24) submitted by Rodney Paskewitz of Duro Rock Supply Co., on behalf of landowner Artesian Properties LLC



The Duro Rock Supply Co. application was originally considered at the June 25th Planning Commission meeting, at which time it was tabled until July 30th, in order to allow for more information gathering.

To recap, Duro Rock is seeking to open a granite quarry in Section 18 of Swedes Forest Township. Specifically, Duro Rock's operations will be located in part of the Southwest Quarter of the Southwest Quarter (SW¼ SW¼). The proposed project area includes approximately 10 acres of granite extraction and approximately 5 acres of boulder extraction. The topsoil will be stripped off and stockpiled for reclamation. The granite material will be mined through blasting or cutting. Duro Rock is seeking a 10 year permit.

There are wetland areas on the parcel and two plant species of note: Oregon Woodsia is state-listed as a special concern plant, and Wolf's spikerush is state-listed as threatened. Duro Rock will pursue a Threatened and Endangered Species Avoidance Plan and coordinate with the DNR regarding the threatened plant species found on the site. Duro Rock will also pursue a Wetland Conservation Act (WCA) No Loss Wetland Application to determine the wetland impacts, if any, and any needed replacement plan.

At the June meeting, various concerns were brought up by members of the public in connection with the proposed quarrying. These included, but were not limited to, the following:

- Noise levels from blasting, crushing, and operating machinery
- Environmental concerns regarding ground and surface water quality and wells
- Public safety from increased truck traffic on the roadway

Information was gathered by staff to address these concerns, from various sources, including the MN Department of Health and Redwood County Highway Engineer.

Noise

The MPCA published "A Guide to Noise Control in Minnesota," in 2015. For residential locations (including farm houses), the daytime (7 a.m.-10 p.m.) noise limits are 65 dBA for not more than six minutes per hour (10% of the time) and 60 dBA for not more than 30 minutes per hour (50% of the time) for non-impulsive noises. Local governments "are required to take reasonable measures to prevent the approval of land use activities that will violate the state noise standard immediately upon establishment of the land use (Minn. R. 7030.0030)." Generally, doubling the distance from a noise source reduces the sound level by 6 decibels. Doubling the source of the sound increases the measured sound by 3 decibels.

Lauren Dickerson with the Air Policy Unit of MPCA stated that there are no standards to address impulsive noise, and there's no definition for an impulsive noise that would constitute a nuisance.

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She referred to an MPCA report for guidance entitled, "Environmental Impulse Noise Study" from 1991. According to the report, "There are occasions when very loud and disruptive levels of noise are present, but do not last long enough to violate the L10 limit during an hour. These events may be referred to as short term, or impulse noise events. Some examples include: back up alarms, whistles, horns, bells, sirens,



fireworks, gunfire, blasting, pile-driving, riveting, hammering, stamping, rail car coupling, sonic booms, aircraft flyovers, and dogs barking." The report examines a few other states' laws that address impulsive noises. Some of the states mentioned had exceptions to limitations on impulsive noises, including back-up alarms and blasting. The report concluded, "Researchers disagree widely on the intrusive effects of environmental impulse noise. There is no clear evidence of any permanent physical effect on the public's health from environmental impulse noise at this time."

An article entitled, "A synthesis of two decades of research documenting the effects of noise on wildlife" published in Biological Reviews by Cambridge Philosophical Society in 2015, examined the scientific literature published from 1990 to 2013 on the effects of anthropogenic noise on wildlife. Two-thirds of the data focused on songbirds and marine mammals, and the majority of studies documented effects from noise, including altered vocal behavior to mitigate masking, reduced abundance in noisy habitats, changes in vigilance and foraging behavior, and impacts on individual fitness and the structure of ecological communities. Biological responses can differ between species. In one study, the number of species of nesting birds was reduced due to anthropogenic noise, but birds that could tolerate noisier habitats had higher numbers due to reduced predation. Reptiles, amphibians, and invertebrates are underrepresented in the research.

Wells

A representative of the Minnesota Department of Health recommended that the homeowners have their wells tested now so that they could document any water quality changes after mining begins. She stated that she did not know specifically what contaminants may be impacted by mining, and it depends on the geology of the area. Arsenic and manganese are from the geology and most likely to be impacted. She also stated that there could be cloudiness if sediment is disturbed.

The DNR Area Hydrologist, Kyle Jarcho, stated in a phone conversation that in determining whether or not to grant a water appropriations permit, they look at everything in the area that would be affected, including wells, aquifers, and wetlands.

Traffic

Anthony Sellner, Redwood County Highway Engineer, stated that the commercial entrance should be moved out of the no passing zone (moved to the east) for driver safety, or they should hire an engineer to review that proper sight distances will be achieved. They will need to work with the highway department on any new entrance.