

TO: Redwood County Planning Commission

**FROM: Nick Brozek
Land Use and Zoning Supervisor
Redwood County Environmental Office**

DATE: June 18, 2019

RE: Planning Commission Hearing on June 24, 2019



A meeting of the Redwood County Planning Commission has been scheduled for Monday, the 24th day of June, 2019, beginning at 1:00 o'clock p.m. at the Board Room of the Redwood County Government Center located at 403 South Mill Street, Redwood Falls, MN 56283.

The meeting will involve five (5) public hearings. A brief summary of the subject matter of the hearings is set forth below.

1. Public hearing on Application for Animal Confinement Feedlot Conditional Use Permit submitted by Mike Boerboom and Laurie Boerboom

Mike Boerboom and Laurie Boerboom are proposing to construct a new swine nursery feedlot consisting of one 102' x 200' total confinement barn with 8' deep under floor manure storage pit, housing 5800 head of swine under 55 pounds in weight (290 animal units). Additionally, a 28' x 40' office will be constructed on the east side of the barn.

Redwood County Feedlot Ordinance requires that a Conditional Use Permit be obtained for the construction of a new manure storage structure.

The feedlot is located in Section 34 of Underwood Township, on the west side of Camp Avenue. The site is an abandoned farm site with the address 28478 Camp Ave. The site is currently owned by Jennifer Coudron. The applicant has a purchase agreement with the owner, contingent upon the approval of the feedlot permit application. Coudron will retain ownership of the tillable land.

An estimated 812,000 gallons of water will be used by the feedlot annually. The site will be served by Lincoln-Pipestone Rural Water System, which has a three-inch main running along the west side of Camp Avenue.

The barn will have an 8' deep poured-concrete manure pit divided into two sections by a 12" thick divider wall with two mats of #4 rebar 12" on center both vertically and horizontally. The wall will sit on a 12" x 48" footing reinforced with four continuous #4 rebar. The manure pit will be further divided by an 8" thick divider wall with one mat of #4 rebar 12" on center vertically and horizontally, on an 8" x 24" footing with two continuous #4 rebar. Consequently, there will be 4 total separate compartments in the pit. There will be 2 manure pump-outs in each compartment, with 4 on the east side and 4 on the west side, for a total of 8 pump-outs. The feed

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bins will be on the northeast and southeast corners of the barn.

The exterior pit walls will be 8" thick with #4 rebar 12" on center vertically and horizontally, supported on an 8" x 16" footing with 2 #4 continuous rebar.

Footings, walls, columns, and floor will be made from 4000 psi concrete. The floor will have 2 lbs. of fiber mesh per cubic yard. The pit floor will be 5" thick with 36" x 36" x 8" footings, with 4 #4 rebar each way, supporting the columns.

The columns will be 12" x 12" with 4 #4 vertical rebar tied with #3 rebar (three per column).

The barn will have 4" perforated perimeter tile around the outside of the pit footing, with an inspection riser.

The closest public drainage ditch to the site is CD 60, about 4500 feet northeast of the site.

The closest county tile main is a 6" branch of CD 60 (branch 19B) located about 250 feet east of the site, on the opposite side of Camp Avenue. Additionally, another 6" branch of CD 60 (branch 15C) is located about 380 feet west of the site.

The four nearest dwellings to the proposed site are as follows: David Swedzinski, about 1785 feet southeast of the site; Mildred Swedzinski, about 1820 feet southeast of the site; Donna Swalboski Trust property, on which there are two houses, about 2620 feet and 2670 feet southwest of the site, respectively; and a farm site owned by Jerry Ausen, about 2650 feet northwest of the site.

Staff used the University of Minnesota OFFSET odor from feedlots setback estimation tool to calculate the Annoyance-free frequency for the following dwellings:

1. D. Swedzinski – 96% annoyance free
2. M. Swedzinski – 96% annoyance free
3. Swalboski – 97% annoyance free (both houses)
4. Ausen – 97% annoyance free

The applicants submitted an Odor Management Plan that includes the following strategies to control odor:

- Treat manure pits with additive
- Balanced diet for the pigs
- Clean up spilled feed promptly
- Incorporate applied manure
- Apply manure during a short window, twice per year
- Maintain grounds (mow, spray, drain surface water)



The applicants submitted a Mortality Plan that includes the following strategies:

- Contract for rendering of dead livestock, to be picked up at least twice per week.
- Construct 4-sided containment structure.



The applicants have 236 acres available for spreading the manure listed on their Land Application Agreements. These fields are located in Underwood Township Sections 34 and 35.

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

2. Public hearing on Application for Extraction Interim Use Permit submitted by Craig Johanneck.

Craig Johanneck, of Johanneck Concrete, is seeking to re-permit and expand the existing Pederson gravel pit, located at 23274 430th Street, Belview, in Section 21 of Swedes Forest Township. The pit was originally permitted under Conditional Use Permit #11-08 in 2008. The pit was later expanded under Conditional Use Permit #3-10, in 2010. CUP #11-08 expired in December of 2018.

The site lies about 4 miles north of the city of Belview, and about 700 feet south of the Minnesota River. 430th Street is a gravel township road. The nearest paved road is CSAH 7, just over a mile away to the west, on 430th.

The site is located in the Agriculture District. Mining is a Conditional Use in the Agricultural District. Part of the Pederson property is located in the Minnesota River Floodplain.

The topsoil will be scraped off and reserved for reclamation. Gravel material will be removed to a maximum depth of 13 feet below existing grade. At the end of the permit term, the side slopes will be graded to 3 to 1 (run to rise) and the stockpiled topsoil will be replaced. Most of the pit will be turned into a pond. The requested permit term is 10 years.

The pit will be about 20 acres in size, as shown on maps attached to the permit application. This includes the current pit, and areas to be mined in the next ten years.

There are no public drainage ditches or drain tile lines on or near the site.

Aside from the Minnesota River, to the northeast of the site, Boiling Spring Creek, and an unnamed tributary thereof, are located about 900 feet southwest of the site.

Old gravel pits are located immediately next to the site to the west and the south. An active gravel pit is located about 1100 feet north of the site

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According to the soil maps for the site, the soil types present are Estherville Sandy Loam, 0 to 2% slopes; Wadena loam, 0 to 2% Slopes; Salida gravelly sandy loam, 2 to 12% slopes; and Oshawa variant stony clay loam.



The three nearest dwellings to the proposed site are as follows:

Jamie & Jennifer Parker, about 100 feet north of the site; Johnathan & Laura Rigge, about 750 feet southwest of the site; and Glenn & Tracie Huseby, about 2100 feet southwest of the site. Additionally, the Rigge property is the site of the Grandview Valley Winery, a commercial restaurant and winery. The winery building is about 550 feet southwest of the pit site.

The Pederson residence is located in the pit site, and will be about 100 feet from the area to be excavated.

The Environmental Office has not received complaints about hauling from the Pederson site.

Pursuant to Redwood County Code of Ordinances, Title XV, Section 153.283, the applicant is required to post a bond, cash deposit, irrevocable letter of credit, or other security to Redwood County in the amount of \$40,000. This amount is based on the ordinance requirement of \$2,000.00 per acre, a minimum of \$10,000.00, or 125% of the estimated/bid value to reclaim the property, whichever is greater. The Redwood County Board of Commissioners may require a higher surety amount, if in the reasonable discretion of the County, the unique characteristics of the proposed project require more substantial restoration or reclamation. Furthermore, the Ordinance states that “[s]ureties shall be for a minimum of one year beyond the ending date of Conditional Use Permit.” Also according to this section, the applicant is also required to provide proof of bodily injury, property damage, and public liability insurance in the amount of at least \$1,500,000.00 per occurrence.

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

3. Public hearing on Application for Animal Confinement Feedlot Conditional Use Permit submitted by Dale, Scott, and Chad Mandelkow

The Mandelkows are proposing to expand an existing cattle feedlot currently consisting of a partial confinement barn and open lots with manure pack and stockpile manure storage, housing 246 head of beef cattle and 45 cow/calf pairs (300 animal units). The proposed expansion will include the construction of two solid-floor total confinement barns with manure pack manure storage. These will replace the two largest open lots. The total number of head on the feedlot site after the proposed expansion will be 900 head of beef cattle and 45 cow/calf pairs (954 animal units). The cow/calf pairs will continue to be housed in the existing partial confinement barn and attached open lot. The new barns will measure 110’ x 360’ and 90’ x 360’, respectively.

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Redwood County Feedlot Ordinance requires that a Conditional Use Permit be obtained for the expansion of an existing feedlot by 200 or more animal units. The proposed expansion will add 654 animal units, per the Redwood County Feedlot Ordinance.



The feedlot is located in Section 2 of Vesta Township, on the south side of Minnesota State Hwy 19. The site is owned by Dale Mandelkow and also serves as Dale's residence. The surrounding farm land is owned by the Mandelkow family.

An estimated 3,417,300 gallons of water will be used by the feedlot annually. The applicant will need to apply for a Water Appropriations Permit from the DNR. There is an existing well on the site, located about 250 feet northeast of the existing partial confinement barn lot, and about 270 feet north of the proposed barns.

The closest public drainage tile main is 600 feet northwest of the feedlot site – an 8" branch of JD 33, Lat A (called Lat 2). The closest public ditch to the feedlot site is JD 33, about 940 feet south of the site.

The three nearest dwellings to the proposed site are as follows: Marshall Meier, about 3500 feet northwest of the site; Paul & Kathryn Alexander, about 4000 feet southeast of the site; and John & Lucy Paskewitz, about 5400 feet southwest of the site. Additionally, Dale Mandelkow's dwelling is located 140 feet north of the site.

Staff used the University of Minnesota OFFSET odor from feedlots setback estimation tool to calculate the Annoyance-free frequency for the following dwellings:

1. Meier – 98% annoyance free
2. Alexander – 99% annoyance free
3. Paskewitz – greater than 99% annoyance free
4. Dale Mandelkow – 83% annoyance free

The Mandelkows submitted an Odor Management Plan that includes the following strategies to control odor:

- Eliminate manure buildup under gates, feeders, etc.
- Regularly scrape barn floors
- Add straw or other bedding material
- Maintain a good neighbor policy
- Avoid spilling manure in problem areas
- Consult with MPCA to identify new strategies

The Mandelkows submitted a Mortality Plan that includes the following strategies:

- Contract for rendering services, to be picked up within 72 hours
- Store dead animals in an enclosed area

The Mandelkows have 1,142 acres listed on their manure management plan available for spreading the manure. These fields are located in Kintire Township Sections 16, 19, 20, 30, and 31; Vesta Township Section 2 and 3; and Echo Township Sections 23, 35 and 36.



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

4. Public hearing on Application for Animal Confinement Feedlot Conditional Use Permit submitted by Tom Jenniges

Tom Jenniges is proposing to expand an existing beef cattle feedlot currently consisting of one partial confinement barn and open lot housing 225 head of cattle. The proposed expansion will consist of the construction of one total confinement, mono-slope barn measuring 60' by 420', with manure pack manure storage, housing 499 beef cattle. The existing partial confinement barn and lot will no longer be used to house livestock.

Redwood County Feedlot Ordinance requires that a Conditional Use Permit be obtained for the expansion of an existing feedlot by 200 or more animal units or whenever a feedlot is expanded above 300 animal units.

The feedlot is located in Section 30 of Waterbury Township, on the north side of 170th Street. The site, and the surrounding farmland, is owned by Mr. Jenniges, and includes Mr. Jenniges's residence.

An estimated 417,900 gallons of water will be used by the feedlot annually. There is an existing well on the site.

Perimeter drain tile will be installed around the barn, to divert surface water away from the barn. This will be done in accordance with the requirements of the EQUIP program, through which Mr. Jenniges is seeking some funding.

The closest public drainage ditch to the project site is JD 36, Lat 1A, Lat U, about 230 feet south of the site. Mr. Jenniges applied for and received a variance from the 300 foot setback from the ditch required in the Zoning Ordinance. Staff spoke with Redwood County Ditch Inspector, Brent Lang, about this project. Mr. Lang does not have any concerns about this project.

The closest county tile main, the outlet of Branch 3 of JD 36, Lat 1A, Lat U, is 350 feet southeast of the feedlot site.

The site is located about 9500 feet north of the Cottonwood River.

The three nearest dwellings to the proposed site are as follows: an unoccupied farm site owned by Verna Timm, about 920 feet south of the site; Justin Stafford, about 1340 feet southeast of the site; and Joel & Amber Demuth, about 3300 feet east of the site. Additionally, the applicant's dwelling is located 225 feet northeast of the site.



Staff used the University of Minnesota OFFSET odor from feedlots setback estimation tool to calculate the Annoyance-free frequency for the following dwellings:

1. Timm – 97% annoyance free
2. Stafford – 98% annoyance free
3. Demuth – Greater than 99% annoyance free
4. Applicant – 88% annoyance free

Mr. Jenniges does not have any specific odor management practices planned. However, converting the feedlot from open lot to roofed barn should reduce odor.

Mr. Jenniges has over 400 acres of farmland he owns on which to spread the manure.

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

5. Public hearing on Application for Animal Confinement Feedlot Conditional Use Permit submitted by Kyle & Michelle Hentges

The Hentgeses are proposing to construct a new wean to finish swine feedlot, consisting of one 148' x 184' total confinement barn with 8' deep under floor manure storage pit, housing 3300 head of finishing swine.

Redwood County Feedlot Ordinance requires that a Conditional Use Permit be obtained for the construction of a new feedlot housing 300 or more animal units or when constructing a new manure storage structure.

The feedlot is proposed to be located in Section 18 of Sherman Township, on the west side of Porter Avenue. The site is currently owned by Bob & Nancy Hanna. The surrounding farm land is owned by the Hannas, who plan to purchase and apply the manure.

An estimated 1,155,000 gallons of water will be used by the feedlot annually. The applicant will need to apply for a Water Appropriations Permit from the DNR. A well will be drilled on the property to provide water for the feedlot.

The barn will have an 8' deep manure pit divided into three sections by 12" thick divider walls on an 8" x 24" footing reinforced with two continuous #4 grade 60 rebar. There will be 4 manure pump-outs in the north section, and three in each of the middle and south sections, for a total of

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10 pump-outs (2 on the north, 4 on the west, 2 on the south, and 2 on the east). The feed bins will be on the east side of the barn.

The walls will be poured with 4000 psi concrete. The floor be 5" thick 3500 psi concrete with 1.5 pounds of fiber mesh per cubic yard.

The exterior pit walls will be 8" thick, with #4 rebar 12" on center both vertically and horizontally. The walls will be supported on an 8" x 16" footing with 2 continuous #4 rebar. The pit will hold 12 months manure storage.

The columns will be 12" x 12" poured concrete with 4 vertical #4 rebar and 3/8 inch ties, supported on 8" x 36" x36" footings with three #4 rebar each way.

The barn will have 4" perforated perimeter tile around the outside of the pit footing, with an inspection riser.

There is no public drainage ditch or tile within 1 mile of the site.

The site is located 349 feet north of an unnamed private ditch, which is listed on the Protected Waters Inventory, and consequently has a Shoreland District designation in the Redwood County Zoning Ordinance. New feedlots are not allowed in the Shoreland District, which is 300 feet on either side of the ditch banks.

The nearest dwellings to the proposed site are as follows: a group of 4 residences in the Lower Sioux Community, located between 2129 and 2432 feet north northwest of the proposed site; Richard & Cheryl Gewerth, about 2550 feet south southeast of the site; and an unoccupied farm site owned by Russell Gewerth, about 2080 feet south of the site.

Staff used the University of Minnesota OFFSET odor from feedlots setback estimation tool to calculate the Annoyance-free frequency for the following dwellings:

1. Lower Sioux Residences (40777, 40785, 40681, and 40633 320th Street) – 97% annoyance free
2. Richard & Cheryl Gewerth – 97% annoyance free
3. Russell Gewerth – 96% annoyance free

The Hentgeses submitted an Odor Management Plan that includes the following strategies to control odor:

- Maintain clean barn floors
- Clean up spilled feed promptly
- Maintain and clean exhaust fans
- Avoid manure pumping on holidays and special occasions
- Consult with MPCA to identify new strategies

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The Hentgeses submitted an Animal Mortality Plan that includes the following strategies:

- Keep carcasses in animal-proof enclosed area, at least 200 yards from neighboring buildings.
- Contract with Central Bi-products for pickup and rendering of carcasses within 72 hours.
- If rendering not available, use composting.

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



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