

NOTICE OF INTENT TO GRANT A PERMIT TO WITHDRAW
WATER FOR ROCK QUARRY PURPOSES
IN HUMBOLDT COUNTY, IOWA

Notice is hereby given that pursuant to Iowa Code Chapter 455B, there is now on file with the Iowa Department of Natural Resources, Water Supply Engineering Section, 6200 Park Avenue, Suite '200'; Des Moines, Iowa 50321, an application as described below

Reding Gravel & Excavating, Iowa DNR Log #34,683, requests a water use permit to withdraw water from one surface water intake on the "Vote Pit" located on land generally described as that part of the SE ¼ lying south of 165th street and north of Three Rivers Trail in Section 6, T92N, R30W, Humboldt County, Iowa, in the maximum quantity of 100 million gallons per year at a maximum rate of 1,800 gallons per minute from the period of March 15 to December 15 of each year, all for dewatering and processing of sand and gravel from a quarry located on said land.

The Department has determined that this use of water conforms to the relevant criteria (Iowa Code Chapter 455B and Iowa Administrative Code Chapter 567) and recommends the permit be granted. A copy of the summary report for the application is available upon a request to the department at the address listed above. Comments on the report and on this use of water must be received by July 28, 2026, and should be addressed "ATTN: Chad Fields" and should specify the applicant's log number (34,683).

**IOWA DEPARTMENT OF NATURAL RESOURCES
WATER USE PERMIT SUMMARY REPORT**

Applicant: Reding Gravel & Excavating – Vote Pit
2001 Oak Street
Algona, IA 50511

Application Log No.: 34,683

Permit Request

The Applicant, Reding Gravel & Excavating, Iowa DNR Log #34,683, requests a water use permit to withdraw water from one surface water intake on the “Vote Pit” located on land generally described as that part of the SE ¼ lying south of 165th street and north of Three Rivers Trail in Section 6, T92N, R30W, Humboldt County, Iowa, in the maximum quantity of 100 million gallons per year at a maximum rate of 1,800 gallons per minute from the period of March 15 to December 15 of each year, all for dewatering and processing of sand and gravel from a quarry located on said land.

The Applicant’s sand and gravel quarry is located on land owned by Daniel, Connie & David Vote. The land is located approximately 1,600 feet west of the city of Bradgate, Iowa, and is approximately 12 acres in size (Figure 1).

Beneficial Use Analysis

Water withdrawn under this permit is used for dewatering and for the production of sand and gravel. Reding Gravel and Excavating (RGE) plans to operate an above-ground quarry located in the same authorized area listed in this authorization. Water is withdrawn for this purpose from one surface intake, located within the area (Figure 1).

Quarrying of earth materials is a recognized beneficial use under Iowa Code §455B.262 and Iowa Administrative Code 567-Chapter 50.2, which defines quarry water use as the extraction of stone, sand, minerals, or other geologic materials from the earth. The majority of the requested allocation is projected to support dewatering of the mined formation and drainage through the quarry and rail track dewatering basins.

No water uses other than dewatering and the washing and processing of earth materials will be authorized under this permit. Water use authorizations are limited to the listed uses within the permit.

Water Sources

The water source for this surface intake is anticipated to be surface exposed groundwater from the alluvial sand and gravel deposits of the West Fork of the Des Moines River. The sand and gravel associated with the Des Moines River in the area is estimated to be approximately 20-60 feet deep, based on geologic records from nearby well logs. There are interbedded units of sands and clays, generally between 15 to 25 feet thick for each unique unit.

Dewatering for the quarry is anticipated to be approximately 20 feet below current ground level. The current ground level is approximately 1,125-1,130 feet above sea level (ASL), which makes the water level dewatering elevation to be 1,105-1,110 feet ASL. Another sand and gravel quarry is located 500 feet to the northeast. The quarry to the northeast does not have a water use permit.

The bedrock below the alluvial sand and gravel is Mississippian-period carbonates and shales. The bedrock is between 20 to 60 feet below the land surface.

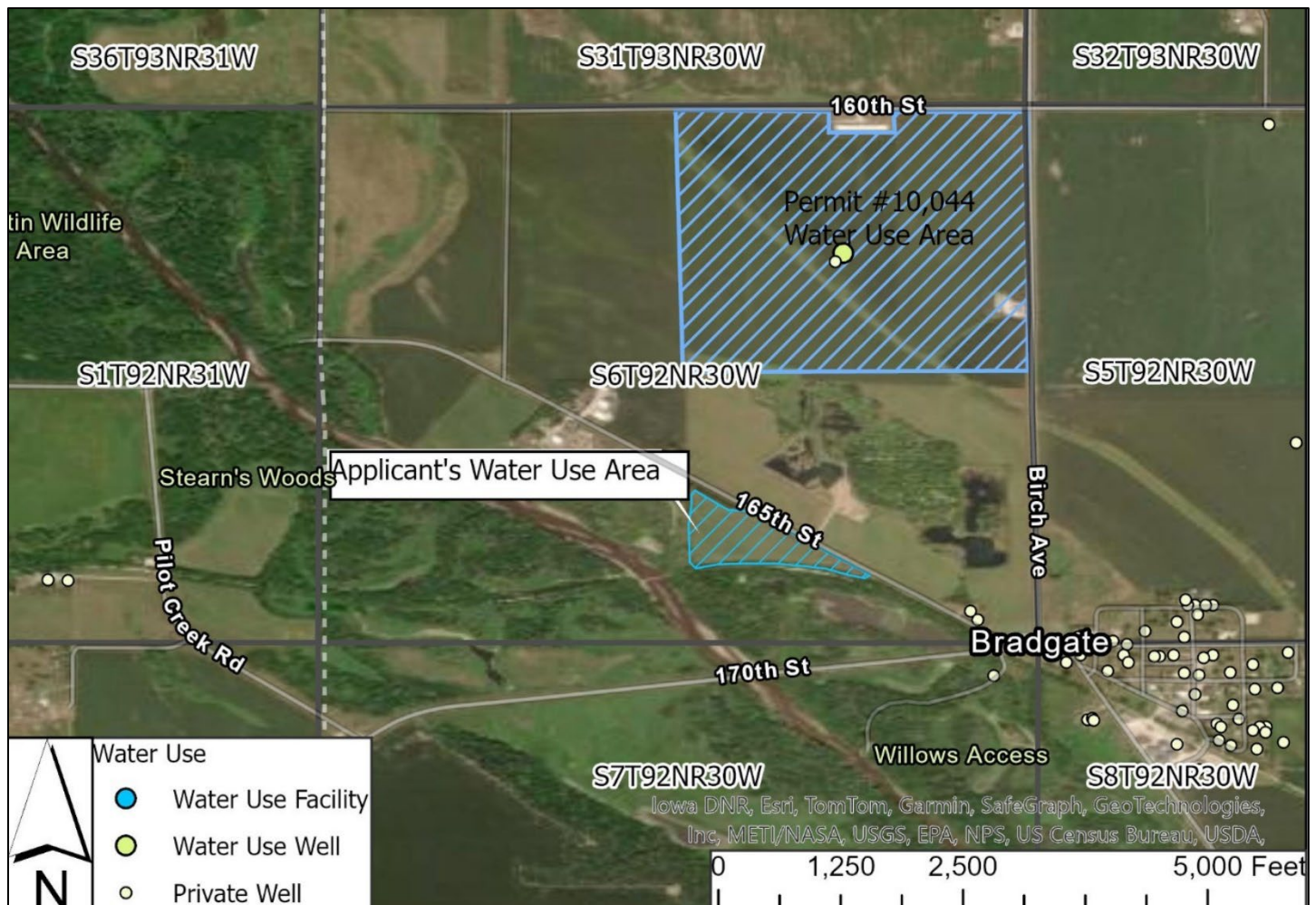


Figure 1. Map of the Reding Gravel and Excavating – Vote Pit and surrounding area, including wells and water use permits.

Nearby Water Users

According to Iowa DNR private well databases (IWIS), the closest wells to RGE – Vote pit are to private wells approximately 850 feet to the southeast. There are two wells in the database at that location, though this might be incorrect information in the database. One of the wells is likely either no longer used, or is an incorrect duplicate. Depths in the wells are only estimates, and are either 18 and 100 feet. If the well is truly only 18 feet deep, it could potentially be impacted by dewatering of the quarry. Most likely, the estimated depth of 100 feet represents the true depth of the well. At this depth the source water of the well is the Mississippian aquifer. The Mississippian aquifer is confined and not hydrologically connected to the Des Moines River alluvium. Quarry dewatering is not anticipated to impact a Mississippian aquifer well.

There are multiple shallow wells used as water sources within the City of Bradgate, approximately 1,600-2,600 feet to the southeast of the Vote Pit. Bradgate has multiple sandpoint and alluvial wells. These wells have a chance of being impacted by dewatering within the pit.

The nearest water use permit to the Applicant's quarry is Permit #10,044, an irrigation permit for 160 acres of general farm crops. The water source for the water use permit is the Mississippian aquifer. These two permits are not anticipated to influence each other.

If water level declines are less than 20 feet in RGE- Vote Pit, well interference from the Vote Pit to private wells in the City of Bradgate is expected to be negligible. The Sichardt Formula ($R = 3000 \cdot s \cdot \sqrt{K}$) yields a radius of influence for the quarry to be likely less than the distance of Bradgate's private wells ($R = 3000 \times 6 \times 0.02406 \approx 433$ m, or about 1,420 ft).

Water rights are also protected for all potentially impacted private wells under 567 IAC Chapter 54.

Protected Flow

The RGE – Vote Pit is located within the 567 IAC Chapter 50 “Protected Flow” setback distance (0-660 feet) for the Des Moines River at the USGS stream gage located downstream from the Vote Pit, at Fort Dodge (USGS Gage ID #05480500). The protected flow is established at 220 cubic feet per second (cfs) at this location. The restriction is set for consumptive uses such as dewatering. When flows at the station are above 220 cfs, all water withdrawals are allowed under the authorization of this permit. When flows are at or below 220 cfs, all consumptive use water withdraws at the facility are to cease.

Findings

The applicant has demonstrated the ability and intent to use a reasonable quantity of water for beneficial purposes. No evidence suggests the proposed use would:

- Waste water resources.
- Conflict with Iowa's comprehensive water resource plan.
- Interfere with pollution control laws.
- Harm public interests or property owners with prior or superior water rights.

THEREFORE:

The requested water use conforms to Division III, Part 4, Chapter 455B of the Iowa Code and Chapter 50 of Part 567 of the Iowa Administrative Code. No adverse impacts on other water users are anticipated at this time. Subject to public notice and potential revisions based on comments received, a draft permit should be issued for a term of ten years

IOWA DEPARTMENT OF NATURAL RESOURCES

WATER USE PERMIT

Permit issued to:

REDING GRAVEL & EXCAVATING
VOTE PIT
2001 E OAK ST
ALTOONA IA, 50511

Permit Number: xxxxxx

Effective: xx/xx/2026

Expires: xx/xx/2036

The Permittee is authorized to:

withdraw water from the Vote Pit, located on land generally described as that part of the SE ¼ lying south of 165th street and north of Three Rivers Trail in Section 6, T92N, R30W, Humboldt County, Iowa, in the maximum quantity of 100 million gallons per year at a maximum rate of 1,800 gallons per minute from the period of March 15 to December 15 of each year, all for dewatering and processing of sand and gravel from a quarry located on said land.

This authorization to withdraw water has been granted pursuant to the provisions of Part 4 of Division III of Chapter 455B, Code of Iowa, and Chapter 50, Part 567, Iowa Administrative Code, and is further subject to the general permit conditions within this permit.

Conditions of this permit may be appealed as provided in rule 567--50.8(3), Iowa Administrative Code. Appeal must be in writing and must be received at the Iowa Department of Natural Resources, Water Supply Engineering Section, 6200 Park Ave. Suite 200, Des Moines, Iowa 50321-1371 within thirty days of the date of the certification of the mailing of the permit.

FOR THE DIRECTOR:

By: _____ Date Executed: June 29, 2026
cc: Permit File

CERTIFICATE OF MAILING

On the date shown below, a copy of the foregoing permit was mailed to the Permittee and to each person entitled to receive a copy as provided by rule 567--50.8(2), Iowa Administrative Code.

Certified by (initials): _____ Date: _____

GENERAL PERMIT CONDITIONS

1. Permittee shall maintain accurate and up-to-date records of monthly water use from each authorized source and submit them annually to the Department.
2. Permittee may be required to submit other information related to the regulation of this use of water as directed by the Department.
3. This Permit is issued pursuant to Iowa Code chapter 455B.265(1) to authorize the withdrawal and use of water by the permittee, subject to the terms contained herein and to the laws and rules of the Department that regulate the withdrawal and use of water. Issuance of this permit does not relieve the permittee of the responsibility to comply with applicable local, state and federal laws, ordinances, regulations or other legal requirements.
4. Permittee shall be responsible for notifying the Department when there are changes to any conditions and authorizations given in this permit, including additional water source(s), well(s), intake(s), an expansion of the facility, or any other listed condition.
5. Permittee shall construct, maintain, and monitor observation wells as directed by the Department to define the effects of Permittee's water withdrawals on groundwater resources or on other water users who might be affected by the withdrawals authorized herein.
6. Permittee shall limit intake to provide for the downstream discharge of that portion of the natural flow in said East Branch Des Moines River that is required to prevent material damage to downstream users.
7. Permittee shall provide screening on water intakes as required in Section 481A.14, Code of Iowa, to protect fish and other aquatic life.
8. Water withdrawn pursuant to this permit shall be discharged to East Branch Des Moines River in accordance with all applicable rules and regulations, shall be of suitable quality, and shall be so discharged as to preclude flooding, erosion, or other adverse effects.
9. Permittee shall not introduce any treatment chemicals or any other pollutants, other than heat, into any water to be injected into the ground without a written authorization from the Department.
10. Permittee must apply to renew this water use permit using the appropriate DNR form prior to the expiration date of the current permit version.
11. Permittee shall cease consumptive withdrawals of water from all authorized intakes in the Reding Gravel and Excavation – Vote Pit, hydrologically connected to the West Fork of the Des Moines River, when stream flow is below the protected flow designation of 220 cubic feet per second at the official gage at Fort Dodge, Iowa. [USGS 05480500]
12. If water withdrawals or uses authorized under this permit are determined by the Department, based on available monitoring data, field observations, or other credible evidence, to be the cause of adverse effects on surface water streams, springs, or ponds, or the ecosystems attached or adjacent thereto, then the Department shall notify the Permittee in writing and may require the Permittee to reduce withdrawal rates, conduct additional hydrogeologic investigations, or take other corrective measures deemed necessary to protect the ecological integrity of those surface waters. The Permittee shall respond to any such notice within 30 days with a proposed corrective action plan, subject to Department approval. For purposes of this condition, "adverse effects" include but are not limited to reductions in baseflow, degradation of cold-water or other designated uses, or harm to species or their habitat.

13. Permittee shall submit to the Department within 90 days of being notified by the Department or no later than the expiration date of this permit, whichever first occurs, a plan for implementing routine day-to-day water conservation measures and for implementing emergency water conservation measures during periods of water shortage. Until such a plan has been submitted to and approved by the Department, Permittee shall implement those emergency water conservation measures determined to be necessary by the Department pursuant to Iowa Code Sections 455B.265 and 455B.266.

CAVEAT

Permittee is advised that pursuant to Section 455B.271, Code of Iowa, the authority to withdraw water provided by this permit may be modified, canceled or suspended in case of any breach of the terms or conditions herein, in case of any violation of state law pertaining to the permit, or if found necessary to prevent substantial injury to private or public interests.