

WATER PERMIT NO. 2498A-2

Name of Applicant: Countryside Homeowner's Association

Address: 6520 Birkdale Dr, Rapid City SD 57702 Phone: 605 718 4717

Amount of Water Claimed: 0.11 cfs Total Acres: 107

Source of Water Supply: one existing well

Water to be used for: irrigation and SHL County: Pennington

Type of Waste Disposal System:

Location: 4 miles south of Rapid City

PRIORITY Date Received: 9-27-16 Application/License Fee: \$ 300 (refund \$650)

Corrected Application Received: 10-6-16 Period of Annual Use: Jan 1- Dec 31

Remarks: Change of use on Water Right No. 2398-2 to include irrigation

Diversion Point: NW 1/4 SE 1/4 Sec 29-T1N-R7E

Land to be Irrigated: portions of N 1/2, N 1/2 S 1/2
Sec 29-T1N-R7E

Depth of Well: 740 feet deep

Well Driller: Cimmarron Drilling

Remarks:

Type of Map:

Prepared by:

Reviewed and the Number Assigned: 6-7-16

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

originally rec'd
9/27/2016

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	(office use only)	
	No. <u>2498A-2</u>	Hydrologic Unit <u>10120110</u>
	Basin <u>Upper Cheyenne River</u>	
	Newspaper <u>Rapid City Journal</u>	
605-394-8300		

RECEIVED
OCT - 6 2016
WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☐ New ☐ Vested Right ☒ Amendment/Correction to Permit No. 2498-2
(Use predates Mar 2, 1955)

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)
Irrigation for Red Rock Golf Course and some Red Rock subdivision residential lots. Original use for permit was suburban housing.

1. Name to Appear on Irrigation Permit Countryside Homeowner's Association

Note: The "Name to Appear on Irrigation Permit" must be the name in which the property to be irrigated is held in.

Mailing Address 6520 Birkdale Dr Rapid City SD 57702
(Address) (City) (State) (Zip Code)

Phone 605-718-4717 Mobile _____ Email KL@unrock@gmail.com

2. Amount of water claimed 0.111 *CFS or 50 **GPM ***AF Total Acreage 107
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply MINNEAPOLIS

4. Location of point of diversion NW 1/4 SE 1/4 Section 29-T1N-R7E (Well lot Blk 12 Countryside subdivision)
(example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W)

County Pennington

5. County or counties where water will be used Pennington

6. Annual period during which water is to be used Jan. 1 - Dec. 31

7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
Sec 29 T1N R7E NW 1/4	44	See attached exhibit	
Sec 29 T1N R7E NE 1/4	44		
Sec 29 T1N R7E N 1/2 SW 1/4	15		
Sec 29 T1N R7E N 1/2 SE 1/4	4		

8. Give a description of the project. (Attach sheet if more space is needed)

Water will be used to supplement irrigation of Red Rock Golf Club, an 18 hole daily fee golf course. The water will be pumped to a 15 acre feet storage pond. The attached exhibit shows the location of the Countryside wells and proximity to the area to be irrigated. The primary source of water for irrigation of the golf course is a City of Rapid City well under permit 2458-2 originally granted to Red Rock Development Co. A copy of this permit is attached to the application.

I, Richard Boenker President, CSHA, the applicant, certify under
Name of Person Title (if applicable)

penalty of perjury that I have read this application, examined the attached map, and that the matters stated are true. I further certify, if acting on behalf of an entity or individual other than myself, that I am authorized to submit this application.

SOUTH DAKOTA
WATER PERMIT NO. 2498A-2

Date of first receipt of application September 27, 2016.

Date of return to applicant for corrections, amendments or changes September 27, 2016.

Date of receipt of corrected application October 6, 2016.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2498A-2 to Countryside Homeowner's Association, 6520 Birkdale Dr, Rapid City SD 57702 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Right No. 2498-2 appropriates 0.222 cfs from a well completed into the Madison Aquifer located in the SE 1/4 SW 1/4 Section 29 and 0.111 cfs from a well completed into the Minnelusa Aquifer located in the NW 1/4 SE 1/4 Section 29; all in T1N-R7E for suburban housing development use. Permit No. 2948A-2 changes the use of 0.111 cfs from the Minnelusa well located in the NW 1/4 SE 1/4 Section 29-T1N-R7E to pump to a 15 acre-feet storage pond for irrigation of Red Rock Golf Course as identified above. The Madison well located in the SE 1/4 SW 1/4 of this section and the 0.222 cfs diversion rate associated with this well is to be abandoned.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: January 1 – December 31.
3. The date from which applicant may claim right is December 9, 2002.
4. The date of approval of Permit No. 2498A-2 is December 26, 2016.
5. One-fifth of the construction is to be completed on or before June 26, 2019.
6. All construction is to be completed on or before December 26, 2021.
7. Water is to be put to beneficial use on or before December 26, 2025.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under this Permit is located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Water Permit No. 2498A-2 authorizes a total annual diversion of 80.36 acre feet of water.
3. Water Permit No. 2498A-2 incorporates the applicable portion of Water Right No. 2498-2 and cancels the abandoned and forfeited portion of the water right.

(continued)

Water Permit No. 2498A-2

Countryside Homeowner's Association

Page 2

4. The abandoned Madison aquifer well authorized by Water Right No. 2498-2 located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 29, T1N, R7E shall be plugged in accordance with South Dakota Well Construction Standards.
5. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: 
Jeanne Goodman, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JAN 30 2017

date



Supplemental Information

(type or print)

1. Well Information

(check one or both as applicable) ☐ Drilling new well(s) ☒ Using existing well(s)

a) If new wells, how many _____ Have test holes been drilled ☐ Yes ☐ No Drilled by _____
(if yes, please provide copies of logs)

b) If existing wells, how many 1 Provide copy of log(s), if available. Drilled by Cimmarron Drilling Inc.

For either Existing or Proposed Wells:

c) Well Depth (required) 740 Depth to Top of Water Bearing Material 590 Depth to Water from Surface 432

d) Distance to nearest domestic well on applicant's property 12 Property owned by others 3000

2. Wastewater Disposal System Information

a) Type of System (i.e. septic tank, drain field) City Sewer

b) System Capacity (gallons) _____ Year Constructed _____

c) Connected to the City of _____ Sanitary System

3. Dugout Information

a) Surface Dimensions _____ Depth _____

b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:

b) Freeboard _____

c) Crest Width _____

Crest Length _____

d) Height _____

e) Primary Outlet Capacity _____

If pipe, diameter _____

f) Secondary Spillway Capacity _____

Spillway Width _____

g) X & Y Slope (e.g. 3 to 1 is a typical slope)

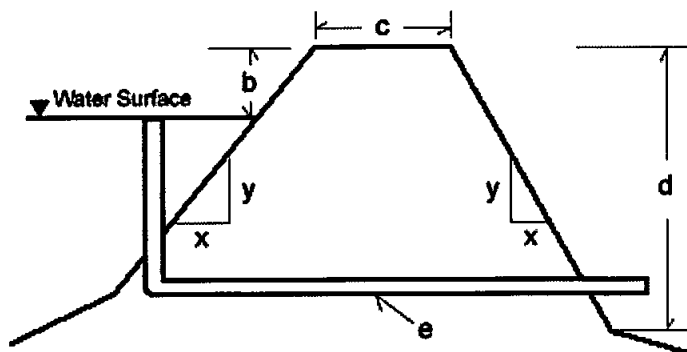
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres



Water Permit No. 2458-2
Red Rock Development Company, LLC



2,000 1,000 0 2,000 Feet



Well located in the NE 1/4 NE 1/4 Section 29, T1N, R7E
Lat/Lon -- N44.106967 W -103.2928
Pond located in the SE 1/4 NW 1/4 Section 29, T1N, R7E
Lat/Lon -- N44.0165 W - 103.3042

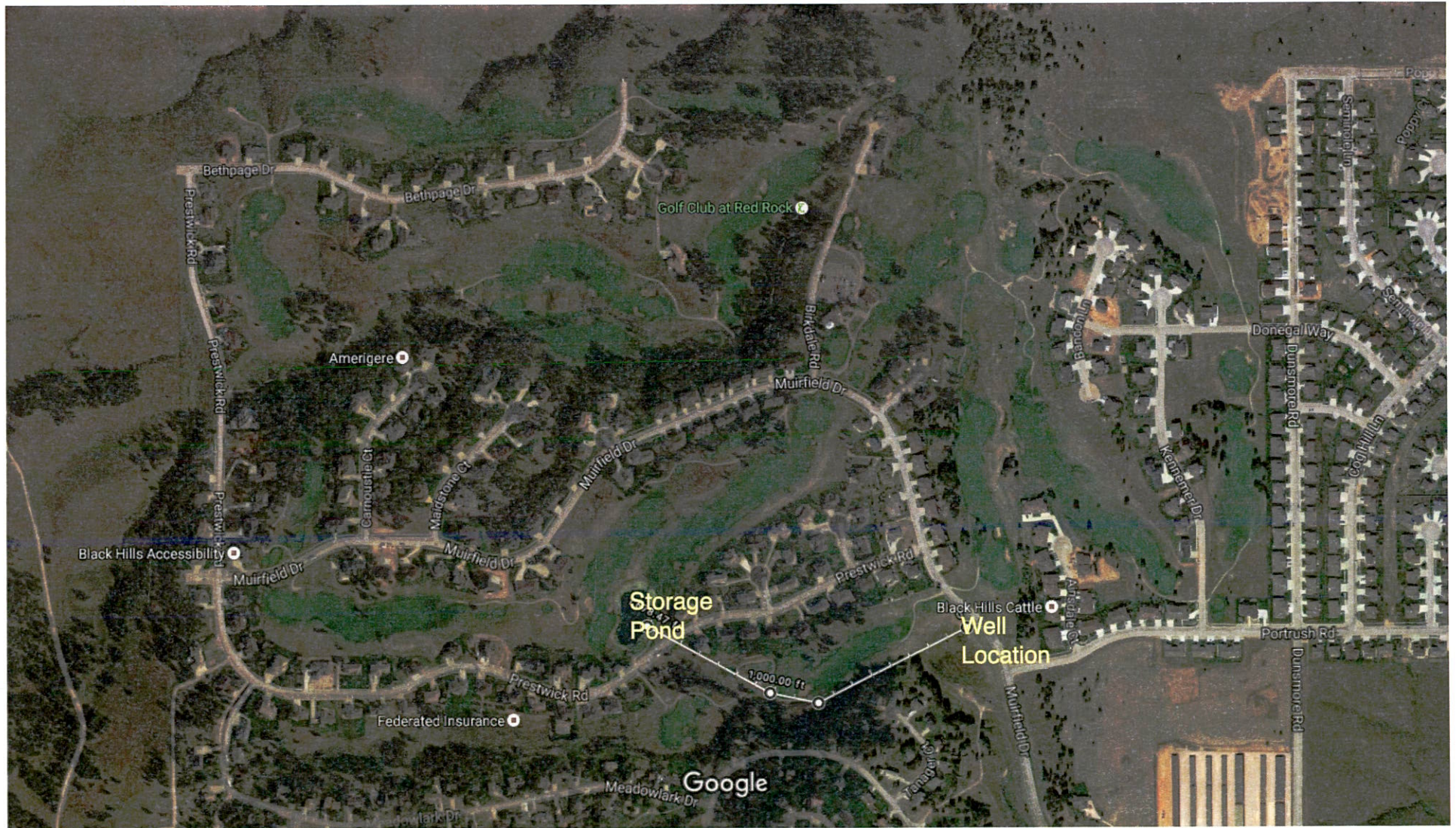
The outlined area serves only as a general
representation of the irrigated acres.

RECEIVED

SEP 27 2016

WATER RIGHTS
PROGRAM


Eric Gronlund
Water Rights Program, DENR
October 31, 2003



Imagery ©2016 Google, Map data ©2016 Google 500 ft

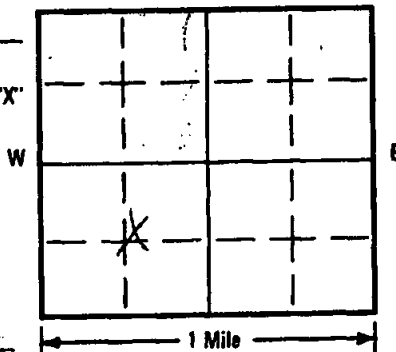
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SEP 27 2016
WATER RIGHTS
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WELL # 3 SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location W 1/4 SW 1/4 Sec 29 Twp 7-N Rg 7-E
County PENNINGTON

Please mark well location with an "X"



Well Completion Date

12-07-01

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 350 ft. from SEPTIC (identify source).

PROPOSED USE:

☒ Domestic/Stock ☒ Municipal ☐ Business ☐ Test Holes
☐ Irrigation ☐ Industrial ☐ Institutional ☐ Monitoring well

METHOD OF DRILLING:

Rotary Air - WATER

CASING DATA: ☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>15.5 LB/FT</u>	<u>5 1/2 IN</u>	<u>0 FT</u>	<u>455 FT</u>	<u>7 7/8 IN</u>
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Portland</u>	<u>65</u>	<u>94/6 lb./gal</u>	<u>0</u> ft.	<u>455</u> ft.
<u>Type T-II</u>	_____	_____ lb./gal	_____ ft.	_____ ft.

Describe grouting procedure Pressure grout thru casing
replace with water to surface with mud pump

SCREEN: ☐ Perforated pipe ☐ Manufactured

Diameter _____ IN Length _____ FEET

Material _____

Slot Size _____ Set From _____ Feet to _____ Feet

Other information _____

WAS A PACKER OR SEAL USED? ☐ YES ☒ NO

If so, what material? _____

Describe packer(s) and location? _____

DISINFECTION: Was well disinfected upon completion?

YES, How: Chlorine
Residuals

NO, Why Not? _____

Laboratory sent to for water quality analysis

Bob Pawlcs To Complete

Well Owner: (Bob Pawlcs)
Business Name: COUNTRY SIDE NORTH
Address: Box 1911
Rapid City S.D. 57709

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Red SHALE</u>	<u>0'</u>	<u>150'</u>
<u>(LOOSE)</u>		
<u>Yellow, white & Pink Sand</u>	<u>150'</u>	<u>370'</u>
<u>Red SHALE</u>	<u>370'</u>	<u>380'</u>
<u>Yellow & Red. S. Sand</u>	<u>380'</u>	<u>450'</u>
<u>Yellow & white Sand</u>	<u>450'</u>	<u>610'</u>
<u>W. lower lower sand</u>		
<u>(Mud pump used)</u>		
<u>(MADISON)</u>		

STATIC WATER LEVEL 350 Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☐ Pumped Describe: Air - developed.

☐ Bailed _____

☒ Other _____

Pumping Level Below Land Surface

610 ft. After 2 Hrs. blow 60+ GPM

400 ft. After 1 Hrs. blow 25+ GPM

If pump installed, pump rate 10 HP @ 500' 40 GPM

REMARKS

This well was drilled under license # 568

And this report is true and accurate.

Drilling firm CIMARRON Drilling Inc.

Signature of License Representative: Michael J. Deutch

Signature of Well Owner or Equitable Property Holder: _____

Date: _____

07-92

North

Date:

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 9/28, 20 16

RECEIVED OF Red Rock Golf Club 6520 Birkdale Dr Rapid City SD 57702

The following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	750	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____	200	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law) TOTAL	950	00

No. **07924**

By *Jeanne Holman*
Chief Engineer

January 26, 2017

PAYMENT REQUEST FORM

PAYEE: Countryside Homeowner's Assn
Richard Boernke - President
7364 Pinon Jay Circle
Rapid City SD 57702

FROM: DENR Water Rights Program
523 E. Capitol Ave
Pierre, SD 57501-3181

DESCRIPTION OF SERVICE, PRODUCE OR TRANSFER

refund on Water Permit No. 2056A-2 \$650.00

Water Permit No. 2498A-2 \$650.00

AMOUNT: \$1,300.00

FUNDING SOURCE:

GENERAL:

FEDERAL:

OTHER: Water Right Fees

COMMENTS:

AUTHORIZATION:



I declare and affirm under the penalties of perjury that this claim is in all things, true and correct. I further agree to comply with the provisions of the Civil Rights Act of 1964 and regulations issued thereunder relating to nondiscrimination in federal assisted programs.

Gronlund, Eric

From: Kevin Buntrock <klbuntrock@gmail.com>
Sent: Thursday, November 17, 2016 2:06 PM
To: Gronlund, Eric
Subject: Re: Countryside water permit application to change use to irrigation

No Eric I think we are good as the restriction exists. Thanks

On Nov 17, 2016, at 12:50 PM, Gronlund, Eric <Eric.Gronlund@state.sd.us> wrote:

Did anything change in you thinking after talking with the superintendent?

From: Kevin Buntrock [<mailto:klbuntrock@gmail.com>]
Sent: Monday, November 14, 2016 5:15 PM
To: Gronlund, Eric
Cc: rick@golfclubatredrock.com
Subject: Re: Countryside water permit application to change use to irrigation

Eric

First thanks for the call. I did some quick math. According to google an acre foot of water is 325,851 gallons so two acre feet would be 651,702 gallons per acre. Our permit is for 107 acres which would be a total of 69,732,114 gallons. We have never used more than 55 million gallons and in wet years less than that.

Another way to look at would be in a big water year we use 55 million gallons $55M/107 \text{ acres}/325,851 \text{ gallons per acre foot} = 1.57 \text{ acre feet of water used in a dry year}$.

I am going to look at this more in the morning with my superintendent, but on my first look at it I think we are okay.

Thanks

Kevin Buntrock

On Nov 14, 2016, at 3:23 PM, Gronlund, Eric <Eric.Gronlund@state.sd.us> wrote:

Kevin:

Ken is currently reviewing and preparing a report for these two applications.

Normally, water permits for irrigation are afforded an maximum annual amount of water that can be applied of 2 acre feet per acre. Basically 24" of water. That works great because conventional crop irrigation such as corn will seldom if ever need that much water. However in the case of turf irrigation (golf courses) more than that 2 acre feet per acre may be needed. State law affords the ability to request application of up to 3 acre feet per acre if the method of irrigation, time constraints or type of soil requires.

Take a look at and call or email your thoughts. If we need to amend the application to request the 3 acre feet per acre, now is the time to do it.

Thanks

Eric Gronlund
605 773-3352

Jacobson, Gail

From: Gronlund, Eric
Sent: Tuesday, December 06, 2016 2:57 PM
To: Jacobson, Gail; Schlaak, Karen; McMath, Genny
Subject: Countryside Homeowner's Associaton - Application Nos. 2056A-2 and 2498A-2

These are applications to change the use from SHD to irrigation for Red Rock Country Club. The applications are just going out to public notice. The President of the Association signed the applications but the listed address is for Red Rock Country Club. I talked with Kevin Buntrock who is the manager at Red Rocks. He said to leave the address as is. The Association wants out of the water business as they are connected to Rapid City but the permits will remain in their name. Not an ideal situation but I said we'd try to make it work.

Gail – put a copy of this email in each file.

Eric



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

December 7, 2016

Richard Boernke, President
Countryside Homeowner's Association
7364 Pinon Jay Circle
Rapid City SD 57702

Dear Mr. Boernke:

Countryside Homeowner's Association filed an application to change the use of water under two water rights from suburban housing development to irrigation use. DENR understands that the Association is now served by the city of Rapid City and two of the wells once used to supply the development will now be used to supply irrigation water to Red Rock's golf course. The application was filed by the Association to change the use of water. However, Kevin Buntrock with Red Rock has coordinated the effort to file the applications seeking to amend the existing water rights to irrigation use. Therefore, DENR has sent correspondence regarding the application to the Association using Red Rock's mailing address since it the address listed on the application.

As President of the Homeowner's Association who signed the applications, DENR wanted you to know the applications are being public noticed with a recommendation for approval. Enclosed is a copy of the cover letter, public notice, staff report and the two recommendations on the applications that was sent to the Red Rock's mailing address. Again, DENR understands that Red Rock is to be handling the contact with the newspaper to authorize publication. The public notice of the applications is to be published on December 15, 2016 in the Rapid City Journal.

Please let me know if you have any questions.

Sincerely,

Eric Gronlund
Water Rights Program, DENR
605 773-3352
Eric.gronlund@state.sd.us

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2498A-2, Countryside Homeowner's Association**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 2498A-2, Countryside Homeowner's Association, c/o Richard Boernke, President, 6520 Birkdale Drive, Rapid City SD 57702.

The Chief Engineer is recommending APPROVAL of Application No. 2498A-2 because 1) the proposed diversion can be developed without unlawful impairment of existing rights, 2) the proposed use is a beneficial use and 3) it is in the public interest with the following qualifications:

1. The well approved under this Permit is located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Water Permit No. 2498A-2 authorizes a total annual diversion of 80.36 acre feet of water.
3. Water Permit No. 2498A-2 incorporates the applicable portion of Water Right No. 2498-2 and cancels the abandoned and forfeiture portion of the water right.
4. The abandoned Madison aquifer well authorized by Water Right No. 2498-2 located in the SE ¼ SW ¼ Section 29, T1N, R7E shall be plugged in accordance with South Dakota Well Construction Standards.
5. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
December 6, 2016

**REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NOS. 2056A-2 AND 2498A-2
COUNTRYSIDE HOMEOWNER'S ASSOCIATION
C/O RICHARD BOERNKE, PRESIDENT
NOVEMBER 14, 2016**

Water Permit Application No. 2056A-2 proposes to amend Water Right No. 2056-2 to allow the change of the use of water to be diverted from an existing well, from suburban housing development use to irrigation use. Water Right No. 2056-2 currently authorizes a maximum diversion rate of 0.30 cubic feet of water per second (cfs) from two wells completed into the Deadwood aquifer for suburban housing development use. Water for suburban housing use is currently provided by the City of Rapid City. The wells are located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ and the NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 29, T1N-R7E. This application proposes to divert water from the well located in the NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 29, T1N-R7E for the irrigation of 107 acres at Red Rock Golf Course. Water from the well is to be pumped at a maximum diversion rate of 0.30 cfs into a 15 acre-foot storage pond located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$, and the SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 29, T1N-R7E. The acreage to be irrigated is located in the N $\frac{1}{2}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$ Sec. 29, T1N-R7E. The well located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 29, T1N-R7E is to be abandoned.

Water Permit Application No. 2498A-2 proposes to amend Water Right No. 2498-2 to allow the change the use of water to be diverted from an existing well, from suburban housing development use to irrigation use. Water for suburban housing use is currently provided by the City of Rapid City. Water Right No. 2498-2 currently authorizes a maximum diversion rate of 0.333 cfs from two wells, one completed into the Minnelusa aquifer and a second completed into the Madison aquifer, for suburban housing development use. The wells are located in the NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 29, T1N-R7E and the SE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 29, T1N-R7E, respectively. The application proposes to divert water at a maximum rate of 0.111 cfs from the Minnelusa aquifer well for irrigation at the Red Rock Golf Course as identified above. The Madison aquifer well located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 29, T1N-R7E is to be abandoned.

SOUTH DAKOTA CODIFIED LAW (SDCL) 46-2A-12, AND 46-5-30.4

SDCL 46-2A-12 requires that:

“An amendment of an existing permit or license may be granted for a change in use, a change in point of diversion or other change only if the change does not unlawfully impair existing rights and is for a beneficial use and in the public interest.”

SDCL 46-5-30.4 requires that:

“Subject to the limitations in §§ 46-5-33 and 46-5-34 governing changes in irrigation rights from one parcel of land to another, any water permit or right holder may apply for a change of use of the water, a change of location of the use or other amendment to the permit or right. Permits or rights may be amended pursuant to the procedure contained in chapter 46-2A. Priority shall be retained upon amendment. An amendment of a water permit or right may not increase the

rate of diversion or increase the volume of water to be appropriated under the original water permit or right. The amendment may not impair existing rights.” This report will address the volume appropriated and diversion rate authorized under the original water rights as compared to the proposed amendments and the potential for impairment to existing rights that may result from these proposed amendments.

Volume Appropriated:

Water Right Nos. 2056-2 and 2498-2 are quantified only in terms of maximum instantaneous diversion rates (i.e. the appropriations do not contain maximum annual diversion limits). Water Right No. 2056-2 authorizes a maximum diversion rate of 0.30 cfs from the Deadwood aquifer. Water Right No. 2498-2 authorizes a maximum diversion rate of 0.111 cfs from the Minnelusa aquifer. The total current annual appropriation for Well No. 2 (Deadwood aquifer) is 217.19 acre-feet/year (ac-ft/yr) and for well No. 3 (Minnelusa aquifer) is 80.36 ac-ft/yr. If the amendment proposed by Application Nos. 2056A-2 is approved, the volume of water appropriated annually from the Deadwood aquifer will remain the same. Approval of Water Permit Application No. 2498A-2 will not change the volume of water appropriated annually from the Minnelusa aquifer.

Diversion rate:

The wells that are to supply Water Permit Application Nos. 2056A-2 and 2498A-2 were completed in 1990 and 2001, respectively. Water Right Nos. 2056-2 and 2498-2 were inspected in 1991 and 2012, respectively. The maximum diversion rate authorized by Water Right No. 2056-2 is 0.3 cfs. Therefore, the diversion authority for the Deadwood aquifer well that is to be used to supply Water Permit No. 2056A-2 (Well No. 2) remains 0.3 cfs. The Minnelusa aquifer well (Well No. 3), authorized by Water Right No. 2498-2, and intended to be used to supply Water Permit No. 2498A-2, currently has a maximum authorized diversion rate of 0.111 cfs. Water Permit Application No. 2498A-2 does not propose a change of the authorized diversion rate from the well.

Potential for Impairment to Existing Rights:

While the proposed change of use from suburban housing use to irrigation use proposed by these applications will not increase the amount of water that is appropriated or the instantaneous diversion rate authorized, the change in use may potentially increase the annual diversions from these wells over what has historically been used for suburban housing development use.

Data from water use records submitted to the DENR-Water Rights Program from Countryside Homeowner’s Association is shown in Table 1.

Table 1. Water usage reported by Countryside Homeowner's Association (Water Rights, 2004-2016).

YEAR	WATER USE PER AQUIFER (ACRE- FEET/YEAR)		
	Deadwood	Madison	Minnelusa
2015	27	46	57
2014			85
2013			75
2012		83	39
2011		64	26
2010		55	29
2009	91 all wells		
2008	57 all wells		
2007		48	13
2006		56	40
2005		55	11
2004		47	8
2003		14	55

The applicant proposes to use water for the irrigation of Red Rocks Golf Course. In the past, Red Rock Development Co., LLC., held Water Right No. 2458-2 which authorized the irrigation of 107 acres using a well completed into the Madison aquifer. In July 2010, the water right was transferred to the City of Rapid City. Water use reported for golf course irrigation under Water Right No. 2458-2, is shown in Table 2.

Table 2. Water use reported for golf course irrigation under Water Right No. 2458-2 (Water Rights, 2002-2016).

YEAR	WATER USE (ACRE- FEET/YEAR)
2015	116.67
2014	84.85
2013	127.27
2012	168.37
2011	115.34
2010	124.62
2009	111.38
2008	129.92
2007	132.58
2006	136.55
2005	128.6
2004	123.3
2003	139.2
2002	64.96
2001	0

Self-reported data in Table 1 indicates the historic maximum annual diversion from the Minnelusa aquifer well was 57 ac-ft/yr. Assuming diversions from the Minnelusa well will be 60% of full time pumping at 0.111 cfs, annual diversions from the well under this amendment would be 48.21 ac-ft/yr. Assuming irrigation only takes place between March 1 and November 1, total water use is expected to be less than 32 ac-ft/yr. Therefore, although the instantaneous diversion rate for the well will remain the same, the average annual diversion will likely decrease from a historic maximum of 57 acre-feet annually to an estimated maximum of 32 acre-feet per

year. Therefore, any impact to existing rights will be reduced. Wells supplied by aquifers either above or below the Minnelusa aquifer will not be impacted by withdrawals from the Minnelusa aquifer since the Minnelusa Formation is overlain by the relatively impermeable Opeche Shale and the lower portion of the Minnelusa Formation can be considered an aquitard. Existing water rights appropriating water from the Minnelusa aquifer are shown in Figure 1 and identified in Table 3 (Water Rights, 2016b). The nearest well completed into the Minnelusa aquifer supplying a water right/permit (Water Right No. 1729-2, Carriage Hills Water Assoc.) is located approximately 1.7 miles north-northeast of the well that is to be used to supply Water Permit No. 2498A-2. The nearest domestic use well completed into the Minnelusa aquifer, on file with the DENR-Water Rights Program, constructed for Robert Nikolas, (Water Rights, 2016c), is located approximately 2,800 feet southeast of the well that is to be used to supply Water Permit No. 2498A-2. There is no history of controversy related to the Minnelusa aquifer in this area and given the distance to existing Minnelusa users, unlawful impairment is not expected.

Data is not available to make a comparison between potential pumping from the Deadwood aquifer well if Application No. 2056A-2 is approved, with historic pumping from the well. Assuming a diversion rate of 0.30 cfs, and diversions of 60% of continuous pumping from March 1 through October (245 days), approximately 87 ac-ft of water would be diverted. Although aquifer characteristics (transmissivity and storativity) are not available for this area, a worst case scenario of the potential drawdown from diversions from this well can be approximated based on data provided on the well completion report.

The well completion report for Well No. 2 indicates a static water level of 245 feet in 1990, and the top of the Deadwood aquifer is at about to be 1,070 feet below grade. The well driller reported that the well had a sustained yield of 150 gallons per minute when air developed from a depth of 860 feet (Water Rights, 2016c). Since a pumping water level during air development would be higher than 860 feet below grade, the maximum drawdown in the well at a rate of 150 gallons per minute would be less than 615 feet, therefore, the minimum specific capacity for this well would be 0.2439 gallons per minute per foot. The transmissivity of the Deadwood aquifer at the well, based a specific capacity of 0.24 gallons per minute per foot is estimated to be 480 gal/day/ft (Duffield). Applying the Theis solution at this well site, assuming: (a) a transmissivity of 480 gal/day/ft; (b) aquifer storativity of 0.0011; (c) 60% of continuous pumping at a rate of 0.30 cfs; and (d) a duration of 245 days; the drawdown that would result 1,000 feet from the production well is estimated to be approximately 67 feet (Utah Division of Water Rights). Relative to the 825 feet of artesian pressure in this area and the fluctuation of the potentiometric surface of the Deadwood aquifer due to climatic conditions of greater than 60 feet, (documented in nearby DENR-Water Rights Observation Well PE-84A) (Water Rights, 2016a), drawdown of 67 feet likely is not considered adverse.

The SD Supreme Court ruled that SDCL 46-6-6.1 does not require the protection of artesian head pressure as a means of diversion. The difference between historic drawdown from this well's pumping and the drawdown projected above would be insignificant.

Wells supplied by aquifers stratigraphically higher than the Deadwood aquifer are not expected to be impacted by well withdrawals from the Deadwood aquifer since the Deadwood Formation is overlain by the relatively impermeable Englewood Formation and lower Madison Limestone.

The lower portion of the Deadwood Formation likely limits any hydrologic connection with the underlying Precambrian age rock.

Existing water rights appropriating water from the Deadwood aquifer are shown in Figure 1 and identified in Table 3 (Water Rights, 2016b). The nearest well completed into the Deadwood aquifer supplying an appropriative right is the “Naylor Well”, which is authorized by Water Right No. 2295-2. The Naylor well is located approximately 4,850 feet south of the well that is to be used to supply Water Permit No. 2056A-2 (Water Rights, 2016b).

The nearest domestic well on file with the DENR-Water Rights Program was constructed for Greg Hollibaugh and is located approximately 5,000 feet south west of the well that is to be used to supply Water Permit No. 2056A-2 (Water Rights, 2016c). Given the distance to existing wells completed into the Deadwood aquifer the change of use proposed by Water Permit No. 2056A-2 is not likely to unlawfully impair existing rights.

In the late 1980’s the DENR-Water Rights Program received complaints regarding decreased production in two domestic wells completed into the Deadwood aquifer located just west of the well Application No. 2056A-2 proposes to use. Water Rights’ Observation Well PE-84A, which is located in this immediate area, did not document water level declines in the aquifer corresponding to the individual’s decreased well production. Consequently, it was concluded that the decreased production were well issues rather than aquifer issues. The domestic wells were deepened, and there has been no further issues reported in the area.

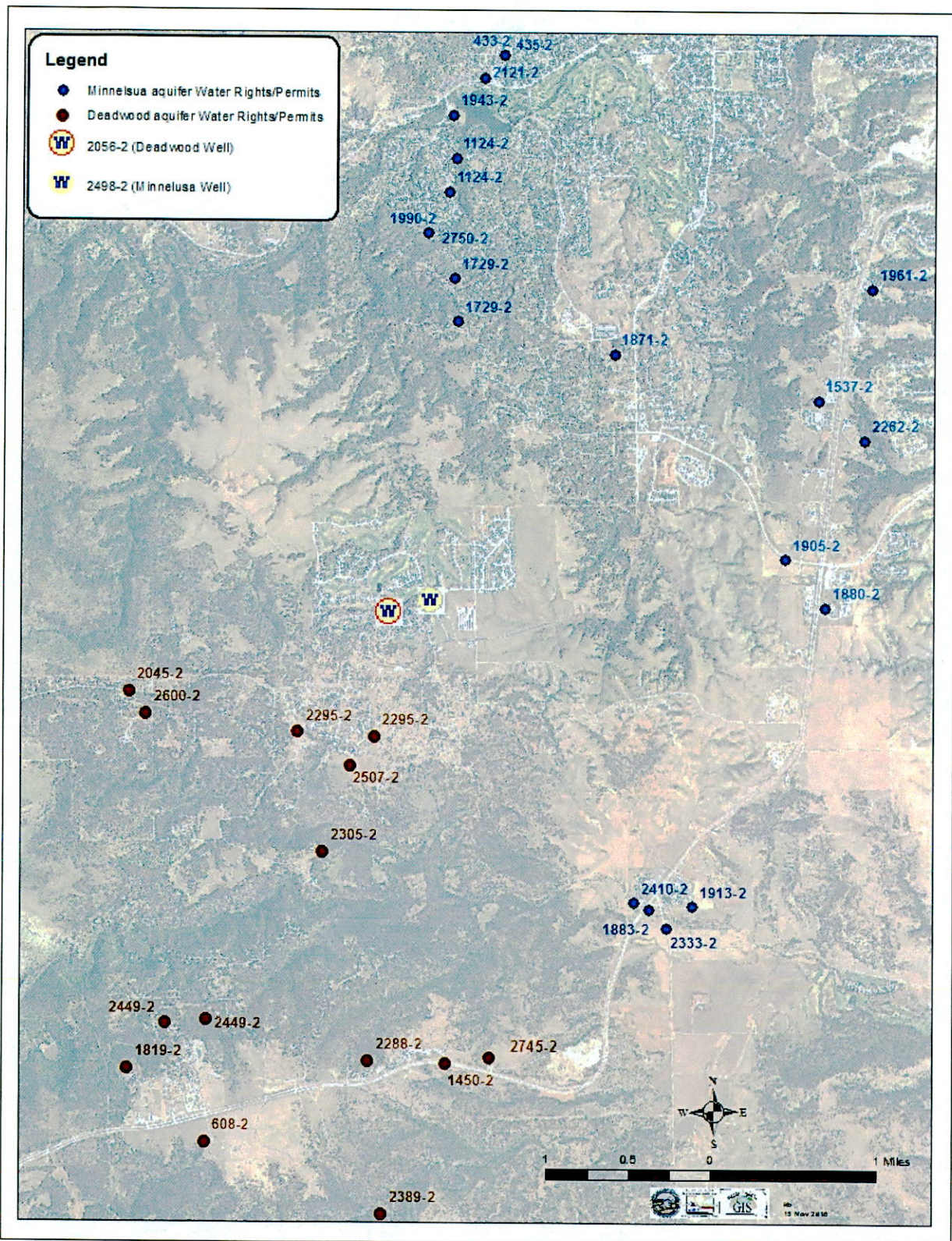


Figure 1. Water rights/permits appropriating water from the Deadwood or Minnelusa aquifer in the vicinity of the wells that are to be used to supply Water Permit Nos. 2056A-2 and 2498A-2.

Table 3. Water Rights/Permits appropriating water from the Minnelusa or Deadwood aquifer in the vicinity of the wells that are to be used to supply Water Permit Nos. 2056A-2 and 2498A-2.

PERMIT NO	NAME	PRIORITY DATE	STATUS	AQUIFER	USE	CFS
1450-2	BEAR COUNTRY USA INC	09/24/1976	LC	DDWD	DOM	0.2
1819-2	STRATO-RIM ESTATES INC	06/10/1982	LC	DDWD	SHD	0.5
2045-2	WHISPERING PINES WATER	11/06/1987	LC	DDWD	SHD	0.08
2288-2	BLACK HILLS RESORTS INC	07/02/1993	LC	DDWD	COM	0.03
2295-2	COLONIAL PINE HILLS SANITARY DISTRICT	10/08/1993	LC	DDWD	SHD	0.289
608-2	UNITED NATIONAL BANK	05/19/1960	LC	DDWD	COM	0.02
2305-2	SPRING CANYON WATER CO	02/25/1994	LC	DDWD	SHD	0.044
2389-2	SITTING BULL CRYSTAL CAVE	06/16/1997	LC	DDWD	COM	0.022
2449-2	OAKS WATER USERS ASSOC	09/22/2000	PE	DDWD	SHD	0.39
2507-2	HANI SHAFI	05/28/2003	LC	DDWD	SHD	0.067
2600-2	GARY KLUTHE	08/18/2006	LC	DDWD	SHD	0.044
2745-2	CROELL REDI MIX	01/27/2016	PE	DDWD	IND/ DOM	0.33
1124-2	CHAPEL LANE WATER CO	09/19/1972	LC	MNLS	SHD	0.56
1537-2	FIRST ASSEMBLY OF GOD	11/04/1976	LC	MNLS	DOM	0.09
1729-2	CARRIAGE HILLS WATER ASSN	09/23/1980	LC	MNLS	SHD	0.27
1871-2	VISTA HILLS WATER ASSOC	03/23/1984	LC	MNLS	SHD	0.09
1880-2	RUSHMORE WATERSLIDE INC	04/19/1984	LC	MNLS	COM	0.17
1883-2	REPTILE GARDENS	07/03/1984	LC	MNLS	COM	0.07
1905-2	BLACK HILLS JELLYSTONE RV	10/09/1984	LC	MNLS	COM	0.06
1913-2	HAPPY HOLIDAY RV RESORT	10/19/1984	LC	MNLS	COM	0.1
1943-2	CANYON LAKE RESORT	09/03/1985	LC	MNLS	COM	0.05
1961-2	THOMAS N ST HILL II	04/07/1986	LC	MNLS	COM	0.08
1990-2	CHAPEL IN THE HILLS	09/15/1986	IL	MNLS	IRR	0
2121-2	CITY OF RAPID CITY	03/19/1990	LC	MNLS	MUN	0.17
2262-2	SKYLINE DR/RUSHMORE INN	03/01/1993	PE	MNLS	COM	0.04
433-2	CITY OF RAPID CITY	01/01/1935	LC	MNLS	MUN	0.84
435-2	CITY OF RAPID CITY	01/01/1936	LC	MNLS	MUN	1.78
2333-2	BERDELL DUNWORTH	03/21/1995	LC	MNLS	COM	0.04
2410-2	FLYING T CHUCKWAGON	05/27/1998	LC	MNLS	COM	0.044
2750-2	CHAPEL IN THE HILLS	09/15/1986	LC	MNLS	IRR (5.5 ACRES)	0.145

CONCLUSIONS:

1. Water Permit Application No. 2056A-2 proposes to authorize the change in the use of water diverted from an existing well completed into the Deadwood aquifer from suburban housing development use to irrigation use.
2. The amendment proposed by Application No. 2056A-2 will not increase the diversion rate authorized from the well.

3. The amendment proposed by Application No. 2056A-2 will not increase the amount of water appropriated from the Deadwood aquifer.
4. The change in the use of water proposed by Application No. 2056A-2 will not adversely impact existing water rights or domestic wells.
5. Water Permit Application No. 2498A-2 proposes to authorize the change in the use of water diverted from an existing well completed into the Minnelusa aquifer from suburban housing development use to irrigation use.
6. The amendment proposed by Application No. 2498A-2 will not increase the diversion rate authorized from the well.
7. The amendment proposed by Application No. 2498A-2 will not increase the amount of water appropriated from the Minnelusa aquifer from the original appropriation under Water Right No. 2498-2.
8. The change in the use of water proposed by Application No. 2498A-2 will not adversely impact existing water rights or domestic wells.



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

Duffield. G. Transmissivity from Specific Capacity. Accessed Nov. 30, 2016.
<http://aqtesolv.com/forum/transcap.asp>

Utah Division of Water Rights. 2010. Theis Equation Calculation for Aquifer Testing and Well Drawdown. Accessed Nov. 30, 2016.
http://waterrights.utah.gov/wellinfo/theis/theis_input.asp

Water Rights, 2004-2016, Water Use Reports for Countryside Homeowners Association, SD DENR-Water Rights Program, Joe Foss Building, Pierre, SD

Water Rights, 2002-2016, Water Use Reports for Water Right No. 2458-2, Red Rock Development Co., LLC, SD DENR-Water Rights Program, Joe Foss Building, Pierre, SD

Water Rights, 2016a, Observation well Records, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota

Water Rights, 2016b, Water Right/Permit Records, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota

Water Rights, 2016c, Well Completion Report Records, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota

Dec 15
L21023011

NOTICE OF APPLICATION

NOS. 2056A-2 and 2498A-2

Notice is given that Countryside Homeowner's Association, c/o Richard Boernke, President, 6520 Birkdale Dr., Rapid City SD 57702 has filed the following applications for a water permit to amend existing Water Right Nos. 2056-2 and

2498-2 to include irrigation use at the Red Rock Golf Course.

Water Right No. 2056-2 appropriates 0.30 cubic feet of water per second (cfs) from two wells completed into the Deadwood Aquifer located in the SE 1/4 SW 1/4 and the NW 1/4 SE 1/4 Section 29-T1N-R7E for suburban housing development use. Application No. 2056A-2 is proposing to change the use of water from the existing well located in the NW 1/4 SE 1/4 Section 29 to irrigation of 107 acres at Red Rock Golf Course located in the N 1/2, N 1/2 SW 1/4, N 1/2 SE 1/4 Section 29-T1N-R7E. Water from the well is to be pumped at a rate not to exceed 0.30 cfs into a 15 acre-foot storage pond located in the NE 1/4 SW 1/4, SE 1/4 NW 1/4 Section 29-T1N-R7E. The well located in the SE 1/4 SW 1/4 of Section 29 is to be abandoned.

Water Right No. 2498-2 appropriates 0.222 cfs from a well completed into the Madison Aquifer located in the SE 1/4 SW 1/4 Section 29 and 0.111 cfs from a well completed into the Minnelusa Aquifer located in the NW 1/4 SE 1/4 Section 29; all in T1N-R7E for suburban housing development use. Application No. 2498A-2 is proposing to change the use of 0.111 cfs from the Minnelusa well located in the NW 1/4 SE 1/4 Section 29-T1N-R7E to pump to a 15 acre-foot storage pond for irrigation of Red Rock Golf Course as identified above. The Madison well located in the SE 1/4 SW 1/4 of this section and the 0.222 cfs diversion rate associated with this well is to be abandoned.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 2056A-2 and 2498A-2 with qualifications because 1) existing rights will not be unlawfully impaired, 2) it is a beneficial use of water, and 3) it is in the public interest. The Chief Engineer's recommendations with qualifications, the applications, and staff reports are available at <http://denr.sd.gov/public> or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing or supporting these applications or recommendations must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendations. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by December 26, 2016.

The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

If the applicant does not contest the recommendations of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the applications pursuant to the recommendations with no hearing held before the Water Management Board. If a petition opposing the applications or contesting the recommendations is filed, then a hearing will be scheduled and the Water Management Board will consider these applications. Notice of the hearing will be given to the applicant and any person filing a petition.

/s/ Steven M. Pirner
Secretary, Department of Environment and Natural Resources

(Published once at the total approximate cost of \$84.54).

Affidavit of Publication

STATE OF SOUTH DAKOTA

County of Pennington

SS:

RECEIVED

JAN 12 2017

WATER RIGHTS
PROGRAM

Carina Tyler being first duly sworn, upon his/her oath says: That he/she is now and was at all time hereinafter mentioned, an employee of the RAPID CITY JOURNAL, a corporation of Rapid City, South Dakota, the owner and publisher of the RAPID CITY JOURNAL, a legal and daily newspaper printed and published in Rapid City, in said County of Pennington, and has full and personal knowledge of all the facts herein stated as follows: that said newspaper is and at all of the times herein mentioned has been a legal and daily newspaper with a bonafide paid circulation of at least Two Hundred copies daily, and has been printed and published in the English language, at and within an office maintained by the owner and publisher thereof, at Rapid City, in said Pennington County, and has been admitted to the United States mail under the second class mailing privilege for at least one year prior to the publication herein mentioned; that the advertisement, a printed copy of which, taken from said Rapid City Journal, the paper in which the same was published, is attached to this sheet and made a part of this affidavit, was published in said paper once each week for 1 successive week, the first publication there of being on the 15 day of Dec. 2016 that the fees charged for the publication there of are 84 dollars and 54 cents.

Subscribed and sworn to before me this 9 day of January, 2017.

Notary public

DUSTIN RICE



NOTARY PUBLIC
SOUTH DAKOTA



My commission expires 7/1/20

Schlaak, Karen

From: Schlaak, Karen
Sent: Wednesday, December 07, 2016 8:19 AM
To: RCY Legals (legals@rapidcityjournal.com)
Subject: 2056A-2 and 2498A-2, Countryside Homeowners Assoc.
Attachments: 2056-2498A-2pluralpublic.short.docx; FORM8.FRM.doc

Attached is a notice to be published on December 15, 2016.

Kevin L Buntrock, 6520 Birkdale Dr, Rapid City SD 57701 (605 718-4717) has been notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP.

Let me know if you have questions. [Please acknowledge receipt of this email.](#)

Karen Schlaak
Water Rights Program
523 E Capitol Ave
Pierre SD 57501
Phone: 605 773-3352

Instruction to Newspaper - Publish the Notice on December 15, 2016. The applicant is responsible for payment.

NOTICE OF APPLICATION NOS. 2056A-2 and 2498A-2

Notice is given that Countryside Homeowner's Association, c/o Richard Boernke, President, 6520 Birkdale Dr., Rapid City SD 57702 has filed the following applications for a water permit to amend existing Water Right Nos. 2056-2 and 2498-2 to include irrigation use at the Red Rock Golf Course.

Water Right No. 2056-2 appropriates 0.30 cubic feet of water per second (cfs) from two wells completed into the Deadwood Aquifer located in the SE 1/4 SW 1/4 and the NW 1/4 SE 1/4 Section 29-T1N-R7E for suburban housing development use. Application No. 2056A-2 is proposing to change the use of water from the existing well located in the NW 1/4 SE 1/4 Section 29 to irrigation of 107 acres at Red Rock Golf Course located in the N 1/2, N 1/2 SW 1/4, N 1/2 SE 1/4 Section 29-T1N-R7E. Water from the well is to be pumped at a rate not to exceed 0.30 cfs into a 15 acre-feet storage pond located in the NE 1/4 SW 1/4, SE 1/4 NW 1/4 Section 29-T1N-R7E. The well located in the SE 1/4 SW 1/4 of Section 29 is to be abandoned.

Water Right No. 2498-2 appropriates 0.222 cfs from a well completed into the Madison Aquifer located in the SE 1/4 SW 1/4 Section 29 and 0.111 cfs from a well completed into the Minnelusa Aquifer located in the NW 1/4 SE 1/4 Section 29; all in T1N-R7E for suburban housing development use. Application No. 2498A-2 is proposing to change the use of 0.111 cfs from the Minnelusa well located in the NW 1/4 SE 1/4 Section 29-T1N-R7E to pump to a 15 acre-feet storage pond for irrigation of Red Rock Golf Course as identified above. The Madison well located in the SE 1/4 SW 1/4 of this section and the 0.222 cfs diversion rate associated with this well is to be abandoned.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 2056A-2 and 2498A-2 with qualifications because 1) existing rights will not be unlawfully impaired, 2) it is a beneficial use of water, and 3) it is in the public interest. The Chief Engineer's recommendations with qualifications, the applications, and staff reports are available at <http://denr.sd.gov/public> or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing or supporting these applications or recommendations must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendations. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by December 26, 2016.

The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

If the applicant does not contest the recommendations of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the applications pursuant to the recommendations with no hearing held before the Water Management Board. If a petition opposing the applications or contesting the recommendations is filed, then a hearing will be scheduled and the Water Management Board will consider these applications. Notice of the hearing will be given to the applicant and any person filing a petition.

Steven M. Pirner, Secretary, Department of Environment and Natural Resources. Published once at the total approximate cost of _____.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

**NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT
THE NEWSPAPER(S) RIGHT AWAY.**

December 6, 2016

Countryside Homeowner's Association
Richard Boernke, President
6520 Birkdale Dr
Rapid City SD 57702

Dear Mr. Boernke:

Water Permit Application Nos. 2056A-2 and 2498A-2 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Rapid City Journal printed at Rapid City SD (Ph # 605-394-8300). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendations of the Chief Engineer and reports on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper(s) to authorize publication of your Notice and to arrange for payment. Early contact with the paper(s) can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendations, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

2056A-2
2498A-2

JAN 30 2017

Countryside Homeowner's Association
c/o Richard Boernke, President
7364 Pinon Jay Circle
Rapid City SD 57702

Dear Mr. Boernke:

Enclosed are Water Permit Nos. 2056A-2 and 2498A-2 authorizing construction of the water diversion system and beneficial use of the water, not exceeding the limits as specified in the water permits.

Red Rock Golf Club submitted a fee of \$950.00 with each application. The application /license fee for Permit Nos. 2056A-2 and 2498A-2 is \$300.00 each. Therefore, a total of \$1,300.00 will be refunded to Red Rock Golf Club. The refund check should be received within a couple of weeks.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, are enclosed. Please return the completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An informational sheet ? *Common Water Right Questions?* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

A handwritten signature in cursive script that reads "Jeanne Goodman".

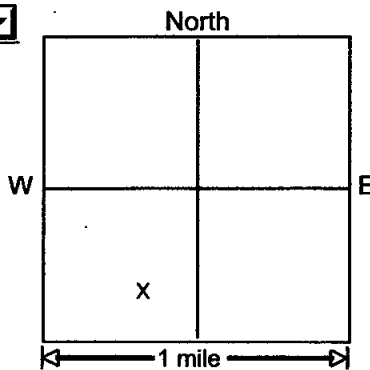
Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

c: Kevin Buntrock, Red Rock Golf Club, 6520 Birkdale Dr, Rapid City SD 57702

SOUTH DAKOTA WELL AND TEST HOLE PLUGGING REPORT 11-02Location SE 1/4 SW 1/4 Sec 29 Twp 1N Rg 7E

Well Owner:

County Pennington ☒Please mark well
location with an "X"Name: Countryside Water Assoc. Att: Peter JensonAddress: PO Box 9111City, State, Zip: Rapid City ☒ SD ☒ 57709

Comments:

Well No.1 Knecht WellPlugging Completion Date 3/24/17**CHECK APPROPRIATE BOX**EXISTING WELL ☒TEST HOLE ☐Well depth 1040 ftCasing material SteelCasing size(s) 7" ODCasing condition OK

Hole depth _____

Hole size _____

Describe plugging procedure:

Pumped cement grout from 1029 ft back to surface in 3 lifts using 2" tremie pipe**RECEIVED****APR - 7 2017**

Describe grout or plugging material:

185 sacks type I-II 15 ppg cement grout**WATER RIGHTS
PROGRAM**

Type of non-slip plug: _____

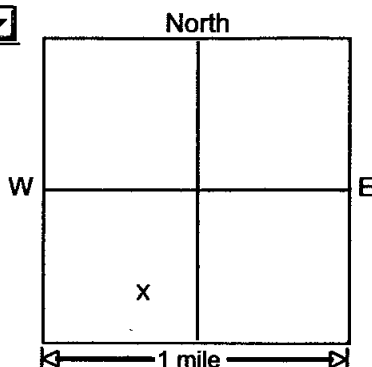
This well or test hole was plugged under license # 331 and this report is true and accurate.Drilling firm: Taylor Drilling Co.Signature of Licensed Representative: K T L

Signature of Well Owner: _____

Date: _____

SOUTH DAKOTA WELL AND TEST HOLE PLUGGING REPORT 11-02Location SE 1/4 SW 1/4 Sec 29 Twp 1N Rg 7E

Well Owner:

County Pennington ☒Please mark well
location with an "X"Name: Countryside Water Assoc. Att: Peter JensonAddress: PO Box 9111City, State, Zip: Rapid City ☒ SD ☒ 57709

Comments:

Well No.4

Permit # 2498-2

Plugging Completion Date 3/24/17**CHECK APPROPRIATE BOX**EXISTING WELL ☒TEST HOLE ☐Well depth 740 ftCasing material SteelCasing size(s) 7" ODCasing condition OK

Hole depth _____

Hole size _____

Describe plugging procedure:

Pumped cement grout from 693 ft back to surface in 3 lifts using 2" tremie pipe**RECEIVED****APR - 7 2017****WATER RIGHTS
PROGRAM**

Describe grout or plugging material:

140 sacks type I-II 15 ppg cement grout

Type of non-slip plug: _____

This well or test hole was plugged under license # 331 and this report is true and accurate.Drilling firm: Taylor Drilling Co.Signature of Licensed Representative: K J L

Signature of Well Owner: _____

Date: _____

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 2498A-2

I have this day, **June 19, 2018** made a thorough examination of the water use system constructed by Country Side Homeowners Association, % Richard Boernke, 7364 Pinon Jay Circle, Rapid City SD 57702 of Permit No. 2498A-2, bearing the priority of 12/9/2002 authorizing the diversion of 0.111 cu. ft. per second of water from one Minnelusa aquifer well for irrigation purposes in Pennington County.

Inspection contact & relationship to permit holder,
if applicable:

Kevin Buntrock, owner Golf Club at Red Rock
605-381-0570
Rick Wit, Course Superintendent
605-718-4710 (Golf Club)

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Cimmeron Drilling (12/2001)
- 2) No. of Wells 1
- 3) Depth(s) 610 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 7" 0 to 455 ft. (note: well log shows 5 ½" casing. Actual measurement is 6 ½" I.D.)
- 2) Length 455 feet and confirmed 7" by Kim Taylor, Taylor Drilling)
- 3) Type Steel

Screen:

- 1) Type open hole
- 2) Length 155 feet
- 3) Static water level 350 ft. (air test 25 gpm @ 400', 60 gpm @ 610')

Pump:

- 1) Make Grundfos
- 2) Model 40S150-44
- 3) Size 6"
- 4) Capacity 40 GPM (variable frequency drive controller set to control pump output at 40 gpm)
- 5) Horsepower rating 15 hp

Dugout Information:

- 1) Surface Area 1.15 acres
- 2) Depth 25 feet
- 3) Storage 15.0 acre-feet

Note: The dugout is used for storage only for water supplied from Country Side Homeowner Association wells and a City of Rapid City well.

B. Works used to transport water to place of use: (well to pond)

1) Type PVC pipeline 2) Size 4 inches 3) Length 1,950' feet

C. Works used to apply water to beneficial use:

A multiple zoned underground sprinkler system for the 18 hole golf course and lawn areas for housing units adjacent to the golf course. Water from the storage pond is boosted using multiple VFD turbine pumps and a submersible pump. The nearby golf course club house and pro-shop are connected to municipal water from the City of Rapid City. The only use of this water is for irrigation.

D. Compliance with Permit Requirements:

1) Permit qualifications being abided by: yes

Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Yes

List any extended period of nonuse: none

2) Exceptions to compliance are: none

E. Condition and Location:

1. The system is in good condition with the point of diversion as follows:

2,312' N and 1,455' W of SE corner Section 29 T1N R7E (44.015783, -103.297703)

2. The works are capable of diverting and conveying to the place of use 0.09 cubic feet per second of water (40 gpm) which is to be used for sprinkler irrigation. Water has been put to beneficial use to the maximum extent as follows:

Section 29 T1N R7E

NW¼ NW¼ 7.0 acres	NE ¼ NW ¼ 15.2 acres
SW ¼ NW ¼ 7.6 acres	SE ¼ NW¼ 10.3acres
NW ¼ NE ¼ 21.1 acres	NE ¼ NE ¼ 11.8 acres
SW ¼ NE ¼ 14.8acres	SE ¼ NE ¼ 13.7 acres
NE ¼ SW ¼ 1.8 acres	NW ¼ SE ¼ 3.7 acres

comprising a total of 107.0 acres of land and the license should be issued for 0.09 cubic feet per second.

All structures, wells and lands on map Yes

F. Comments or other permit(s) associated with the project: Water Right No. 2498-2 appropriated 0.222 cfs from a well completed into the Madison Aquifer located in the SE ¼ SW ¼ S29 T1N R7E and .111 cfs from a well completed into the Minnelusa Aquifer located in the NW ¼ SE ¼ S29 T1N R7E for suburban housing development use. Permit No. 2498A-2 changed the use of .111 cfs from the Minnelusa well to pump to a 15 acre-foot storage pond for irrigation of 107 acres at Red Rock Golf Course. This well serves as a supplemental water source to the City of Rapid City well authorized by License No. 2458-2. The Madison well located in the SE ¼ SW ¼ Section 29 was to be abandoned. This well was plugged by Taylor Drilling on 3/24/17. Permit No. 2056A-2 authorized a Deadwood Aquifer well also located in the NW ¼ SE ¼ S29. This well is located 20 feet west of the Minnelusa Aquifer well and also serves as supplemental water for the golf course.

Report of Examination of Works

Permit No. 2498A-2



Steven Quissell
Water Rights Inspector
DENR Water Rights Program

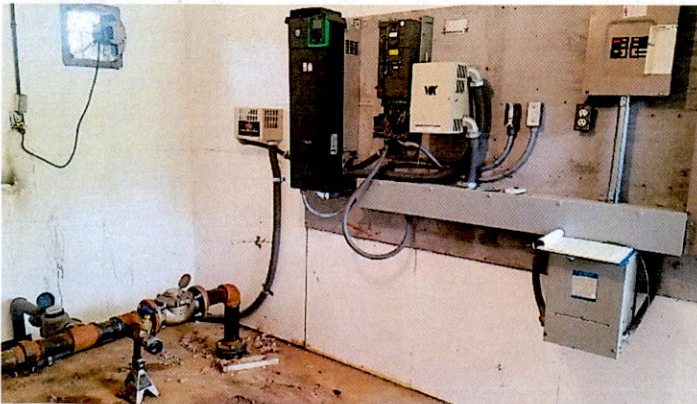
Date report completed: **July 23, 2018**



Dakota Aquifer well, the Minnelusa well is located 20' to the east and is hidden by tall grass.

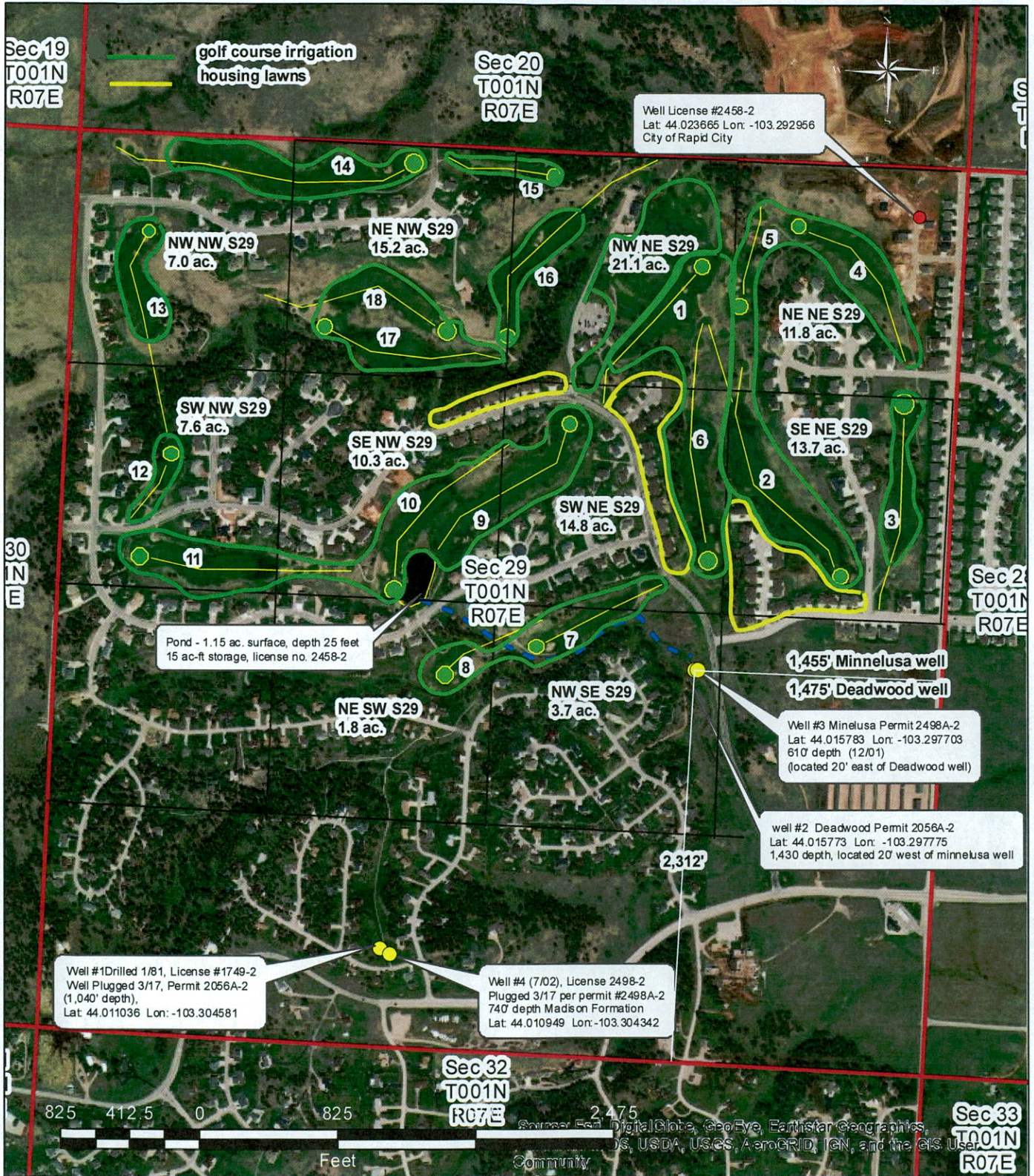


PVC supply from Dakota and Minnelusa wells discharging into storage pond. Metal trash rack and riser is overflow structure for pond. Pump house is situated at side of pond.



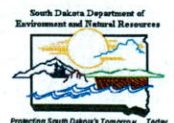
Plumbing in pump house with flow meters for each well.

**Water Right #2056A-2 and 2498A-2
Country Side Home Owners
6/19/2018**



Steven Quissell

Steven Quissell
Water Rights Inspector
DENR Water Rights Program



SOUTH DAKOTA WATER WELL COMPLETION REPORT

2498A-2

07-92

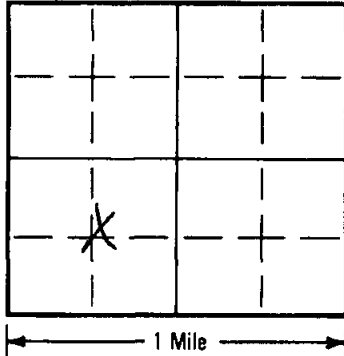
Location Well 1st 1/4 SW 1/4 Sec 29 Twp 1-N Rg 7-E
 County Pennington

Please mark well location with an "X"

W

E

Well Completion Date

1207-01

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 350 ft. from Septic (identify source).

PROPOSED USE:

☒ Domestic/Stock ☒ Municipal ☐ Business ☐ Test Holes
☐ Irrigation ☐ Industrial ☐ Institutional ☐ Monitoring well

METHOD OF DRILLING:

Rotary Air - WaterCASING DATA: ☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>15.5</u> LB/FT	<u>5 1/2</u> IN	<u>0</u> FT	<u>455</u> FT	<u>7 7/8</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type Portland No. of Sacks 65 Grout Weight 94/6 lb./gal From 0 ft To 455 ft
Type I-II lb./gal ft ft
 Describe grouting procedure Pressure grout thru casing
displace with water to surface with mud pump

SCREEN: ☐ Perforated pipe ☐ Manufactured

Diameter _____ IN Length _____ FEET

Material _____

Slot Size _____ Set From _____ Feet to _____ Feet

Other information _____

WAS A PACKER OR SEAL USED? ☐ YES ☒ NO

If so, what material? _____

Describe packer(s) and location? _____

DISINFECTION: Was well disinfected upon completion?

YES, How: Chlorine
Pellets

Laboratory sent to for water
 quality analysis

Bob Pawles To Complete

Well Owner: (Bob Pawles)
 Business Name: COUNTRY SIDE NORTH
 Address: Box 1911
Rapid City S.D. 57709

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Red Shale</u> <u>(OP ECH)</u>	<u>0'</u>	<u>150'</u>
<u>Yellow, white & Pink Sand</u>	<u>150'</u>	<u>370'</u>
<u>Red Shale</u>	<u>370'</u>	<u>380'</u>
<u>Yellow & Red Sandstone</u>	<u>380'</u>	<u>450'</u>
<u>Yellow & White Sand</u> <u>W limestone ledges</u> <u>(MINNEAPOLIS)</u>	<u>450'</u>	<u>610'</u>

STATIC WATER LEVEL 350 Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☐ Pumped Describe: Air - developed.☐ Bailed _____☒ Other _____

Pumping Level Below Land Surface

610 ft. After 2 Hrs. 8lew 60+ GPM400 ft. After 1 Hrs. 6lew 25+ GPMIf pump installed, pump rate 10 HP @ 500' 40 GPM

REMARKS

RECEIVED

FEB 15 2002

This well was drilled under license # 568 WATER RIGHTS PROGRAM

And this report is true and accurate.

Drilling firm CIMARRON Drilling IncSignature of License Representative: Michael J. Deutch

Signature of Well Owner or Equitable Property Holder: _____

Date: _____

2498A-2



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

SEP 06 2018

2056A-2
2498A-2

Richard Boernke
Countryside Homeowners Assoc
7364 Pinon Jay Circle
Rapid City SD 57702

Dear Sir:

Enclosed are Water License Nos. 2056A-2 and 2498A-2. They are the final water right documents completing the process of obtaining a Water Right. Included with each license is a map prepared by the staff engineer who conducted the field investigation.

For your information SDCL 46-6-27 requires that if in the future, the owner of an existing well, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

As long as you use the water beneficially, as stated in the Water License, the State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Sincerely,

Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

c: Kevin Buntrock, 6520 Birkdale Dr., Rapid City SD 57702 (licenses and map)

STATE OF SOUTH DAKOTA
WATER LICENSE NO. 2498A-2

(1) Countryside Homeowner's Association, 7364 Pinon Jay Circle, Rapid City SD 57702 made Application No. 2498A-2, September 27, 2016 for a water permit to change the use of 0.111 cubic feet of water per second water (cfs) from the Minnelusa Aquifer well described in Water Right No. 2498-2 from suburban housing to irrigation use. Water from the well was to be pumped into a 15 acre feet storage pond for irrigation of 107 acres of the Red Rock Golf Course. The project is located in Pennington County, South Dakota. Permit No. 2498A-2, with a priority date of December 9, 2002 (established under Water Right No. 2498-2) was approved December 26, 2016 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before December 26, 2021 and for the application to beneficial use of said water on or before December 26, 2025.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 0.09 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 2,312'N and 1,455' W of the SE corner of Section 29, T1N, R7E (NW ¼ SE ¼)
Latitude 44.015783, Longitude -103.297703

The above well is located 20 feet west of a Deadwood Aquifer well authorized under Water Right No. 2056A-2 and serves as a supplemental water source for irrigation of the golf course.

(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to irrigate the following land:

Section 29, T1N, R7E					
NW ¼ NW ¼	7.0 acres	NW ¼ NE ¼	21.1 acres	NE ¼ SW ¼	1.8 acres
NE ¼ NW ¼	15.2 acres	NE ¼ NE ¼	11.8 acres	NW ¼ SE ¼	3.7 acres
SW ¼ NW ¼	7.6 acres	SW ¼ NE ¼	14.8 acres		
SE ¼ NW ¼	10.3 acres	SE ¼ NE ¼	13.7 acres	Total 107.0 acres	

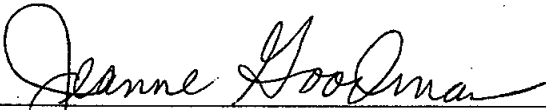
(4) Pursuant to South Dakota Water Law 46-5-30.1 Countryside Homeowner's Association, 7364 Pinon Jay Circle, Rapid City SD 57702 the holder and/or owner of Water Right No. 2498A-2 is issued a license to appropriate water, the right to use 0.09 cubic feet of water per second from ground water, one well (Minnelusa Aquifer) with a priority date of December 9, 2002 from the location specified in (2) of this license for irrigation purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 2498A-2 and subject to the following qualifications:

- The well approved under this Permit is located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

continued

- Water Right No. 2498A-2 authorizes a total annual diversion of 80.36 acre feet of water.
- Water Permit No. 2498A-2 incorporates the applicable portion of Water Right No. 2498-2 and cancels the abandoned and forfeited portion of the water right. *This was applicable at the initial permitting stage of No. 2498A-2.*
- The abandoned Madison Aquifer well authorized by Water Right No. 2498-2 located in the SE ¼ SW ¼ Section 29, T1N, R7E shall be plugged in accordance with South Dakota Well Construction Standards. *This well was plugged on March 24, 2017 by Taylor Drilling. A copy of the well plugging report is on file with the Water Rights Program.*
- This Permit is approved subject to the irrigation water use questionnaire being submitted each year.



Jeanne Goodman, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

SEP 06 2018

date

