

WATER PERMIT NO. 5905-3

Name of Applicant: City of Groton

Address: Box 587, Groton SD 57445-0587

Phone: 605 397-8422

Amount of Water Claimed: no add'l

Total Acres: no add'l (30 acres)

Source of Water Supply: city runoff and groundwater

Water to be used for: municipal use at the city golf course

County: Brown

Type of Waste Disposal System: NA

Location: within city limits

PRIORITY

Date Received: 12-14-95

Fee: \$150

Corrected Application Received: 1-26-96

Period of Annual Use: March 1 - November 1

Remarks: Requests additional diversion point to be pumped into a holding pond to irrigate lands authorized by Permit No. 5249-3.

Diversion Point: well no. 3 - NW 1/4 SW 1/4
city runoff and Mud Creek - SE 1/4 SE 1/4
all in Sec 19-T123N-R60W

Land to be Irrigated: SE 1/4 Sec 19 and
SW 1/4 SW 1/4 Sec 20; all in T123N-R60W

Depth of Well:

Well Driller:

Remarks:

Type of Map: aerial

Prepared by: Ron Duvall

Reviewed and the Number Assigned on: 1-29-96

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

(Type or print)

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	(office use only)	
	No. <u>5905-3</u>	Hydrologic Unit <u>10160005</u>
	Basin <u>James River</u>	Newspaper <u>Groton Independent, Groton, SD</u>



Application For Permit To Appropriate Water For Irrigation

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

Description of amendment/correction: (i.e. acreage change, change diversion point(s), add diversion point(s), etc.)

*Add'l sources of water - well #3 and city runoff & mud creek allows pumping from all 3 sources into holding pond

- Name of Applicant City of GROTON ☒ Owner ☐ Tenant/Lessee Phone 397-8422
 Mailing Address Box 587, Groton S.D. 57445-0587 (Street, RR, or Box) Sec 8 State SD (Zip Code) 57445
 Amount of water claimed _____ *CFS or _____ **GPM _____ ***AF Total Acreage 5249-3
 (*Cubic Feet per Second) (**Gallons per Minute) (***) Acre Feet - storage capacity of dam/dugout if applicable) 112 ac
- Source of water supply Run-off, City Wells #3, Mud Creek
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) Well #3-NW1/4 SW1/4, Mud Creek & runoff-SE1/4 SE1/4; Sec. 19-T123N-R60W County Brown
- County or counties where water will be used Brown
- Annual period during which water is to be used March thru Nov
- 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
SAME AS #5249-3			
NW1/4 SE1/4 Sec. 19-T123N-R60W	40	NE1/4 SE1/4 Sec. 19-T123N-R60W	7
SW1/4 SE1/4 Sec. 19-T123N-R60W	40	SW1/4 SW1/4 Sec. 19-T123N-R60W	5
SE1/4 SE1/4 Sec. 19-T123N-R60W	20		

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

Olive Grove Golf Course, East side of GROTON

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

STATE OF SOUTH DAKOTA)

ss

County of Brown

Daniel D. Johnson, the applicant, have read this application, examined the attached map, and certify that the matters stated are true. I intend and am able to complete the necessary construction.

Signed

Daniel D. Johnson

Subscribed and sworn to before me this 11th day of December 19 95

Anita Lowmy

Notary Public



The Olive Grove Golf Course irrigation reservoir is on the edge of Mud Creek northwest of the intersection of US Highway 12 and Brown County 12A (old 12) going into Groton. The legal description of the of golf course is:

That portion of the West Half (W 1/2) of the Southeast Quarter (SE 1/4) of Section 19, Township 123, Range 60 West of the Fifth P.M. lying East of the right of way and depot grounds of the Chicago and Northwestern Railroad and North of the public highway as now located, formerly known as the Yellowstone Trail and except that portion deeded to the State of South Dakota and other parties now of record;

That portion of the East Half (E 1/2) of the Southeast Quarter (SE 1/4) of Section 19, Township 123, Range 60 West, lying South and West of U.S. Highway 12 as now located and North of the public highway as now located formerly known as the Yellowstone Trail and except that portion deeded to the State of South Dakota and others for highway purposes;

That portion of the West Half (W 1/2) of the Southwest Quarter (SW 1/4) of Section 20, Township 123, Range 60 West, lying South and West of U.S. Highway 12 as now located and North of the public highway as now located, formerly known as the Yellowstone Trail and except that portion deeded to the State of South Dakota and others for highway purposes.

We estimate that it holds about 7 million gallons.

The main source of water is run-off from the East side of Groton and water from the landscape of the golf course. The second source is when Mud Creek floods and backs into our reservoir. The third source is a backup plan for drought condition when we will use the #3 well of the City of Groton (located on the NW Quarter (NW 1/4) of the Southwest Quarter (SW 1/4) of Section 19, Township 123, Range 60W)

All of this water except for the backup from Mud Creek has to be pumped into the reservoir with centrifugal pumps powered by tractors. Depending on the amount of water determines how fast we are capable of pumping it. The maximum we can move is about 20,000 gal per min. When the reservoir is full, the balance spills over into Mud Creek just where it would have gone if we not built the reservoir.

SOUTH DAKOTA
WATER PERMIT NO. 5905-3

Date of first receipt of application December 14, 1995.

Date of return to applicant for corrections, amendments or changes December 20, 1995.

Date of receipt of corrected application January 26, 1996.

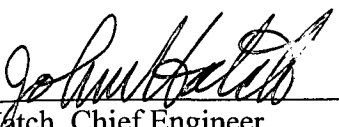
The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 5905-3 to the City of Groton, PO Box 587, Groton SD 57445-0587 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 5905-3 authorizes additional diversion points to irrigate lands authorized by Water Permit No. 5249-3. Water Permit No. 5249-3 appropriates 1.6 cubic feet of water per second (cfs) from a holding pond (approximately 20 acre-feet storage capacity) located in the SE 1/4 SE 1/4 Section 19 and the SW 1/4 SW 1/4 Section 20 to irrigate 112 acres of a golf course located in the SE 1/4 Section 19 and the SW 1/4 SW 1/4 Section 20; all in T123N-R60W. An investigation of Permit No. 5249-3 found up to 30 acres being irrigated with additional water sources from city runoff and city well No. 3 being used for irrigation. This permit will pump city runoff flows into the holding pond as well as flood flows from Mud Creek. During high runoff conditions, water may be pumped into the holding pond at a rate of up to 20,000 gpm (44.54 cfs). The diversion point for the city runoff flows and from Mud Creek is located in the SE 1/4 SE 1/4 Section 19-T123N-R60W. During low water conditions, water may also be pumped (up to 0.66 cfs) from well No. 3 located in the NW 1/4 SW 1/4 Section 19-T123N-R60W, diverted through the City's storm sewer system and into the holding pond.
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: March 1 - November 1.
3. The date from which applicant may claim right is December 14, 1995.
4. The date of approval of Permit No. 5905-3 is March 25, 1996.
5. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. Low flows as needed for downstream domestic use, including livestock water and prior water rights must be by-passed.
2. This permit is approved subject to the irrigation water use questionnaire being submitted each year.
3. Well No. 3 under this Permit shall be valved and the flow reduced to the amount needed or to a minimum when not being used (directly or for storage purposes).

WATER MANAGEMENT BOARD

By: 
John Hatch, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JUL 2 1996

date



Water Rights Program -- File Documentation

NAME: City of Groton

ADDRESS: 209 N Main, Groton SD 57445

DATE: August 9, 1995 **COUNTY:** Brown **TELEPHONE:** 397-8422

RE: Inspection of Water Permit No. 5249-3 and Vested Water Right No. 1649-3

COMMENTS:

On May 10, 1995, a follow-up inspection was completed of the golf course authorized by Permit No. 5249-3 and the city wells authorized by Vested Right No. 1649-3. The vested water right was validated by the Water Management Board on September 30, 1992.

According to Dan Johnson, Water Superintendent, well Nos. 1 and 2 are capped and Nos. 3 and 4 are used for standby purposes. The city is currently supplied water by WEB rural water. Well No. 3 free flows at approximately 20 gpm to the city storm sewer and then into Mud Creek. Mr. Johnson indicated that well No. 3 can be pumped at a rate of 300 gpm. Well No. 4 free flows at 3 gpm and can be pumped at a rate of 60 gpm.

Based on a conversation between the city and Tim Schaal, staff engineer, the issue was raised whether a water permit was needed for irrigation for well No. 3 since water was being pumped from Mud Creek into the golf course holding pond. Mr. Johnson indicated that the reason the well was flowing was not for supplying water to the golf course. The concern with valving down the well or shutting off the well is whether the casing will collapse if the pump automatically turns on to supplement the WEB supply. I told Mr. Johnson during the inspection that the well flow needs to at least be reduced to a minimum.

I spoke to Tom Mahan regarding Water Permit No. 5249-3 for the golf course. According to Mr. Mahan, the irrigation system irrigates up to 30 acres using a low pressure sprinkler system as specified in the permit file. Water is diverted at a rate of 250 gpm with 135,000 gallons diverted during a pump cycle.

RECOMMENDED ACTION:

- On September 30, 1992, Vested Water Right No. 1649-3 was validated. However, the original validation publication contained errors concerning the legal description of the wells. The section number should be 19 rather than section 20 and the wells maintained for standby (Well Nos. 3 and 4) are located in the NW1/4 SW1/4 and SE1/4 SW1/4. Well Nos. 1 and 2 are capped and should not be included in the readvertisement.

August 9, 1995
City of Groton

No. 1649-3
No. 5249-3

- The two capped wells should be plugged provided the city has no intention of using the wells in the future.
- Well No. 3 is capable of producing 300 gpm according to Mr. Johnson. The permitted pump rate is 125 gpm as specified on Vested Right No. 1649-3. The city has the option of either limiting the pump rate to 125 gpm or applying for a permit to increase the permitted diversion rate to 300 gpm.
- The 20 gpm flow from well No. 3 needs to be reduced to a minimum (if some flow is needed to prevent freeze up) or shut off if freezing is not a concern. It is possible to modify the construction of the well to allow the pump to turn on without damaging the casing. According to Jim Goodman, staff engineer, the City of Rapid City has flowing wells equipped in this manner. A licensed well driller familiar with flowing well systems should be able to assist the city.
- Permit No. 5249-3 authorizes use of Mud Creek flows to fill a reservoir via gravity for purposes of irrigating the golf course. This permit does not authorize the pumping of Mud Creek flows to fill the golf course reservoir. If the city intends to pump water from Mud Creek to the reservoir, then another permit will be needed to allow the pumping.



Ron Duvall, Natural Resources Engineer
Water Rights Program



August 14, 1995

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

Gerald Rix, Mayor
City of Groton
PO Box 587
Groton SD 57445

Dear Mayor Rix:

On May 10, 1995, I completed an inspection of a water permit (No. 5249-3) for the city golf course and a vested right (No. 1649-3) for the city's standby water supply. I am writing to inform you of the inspection results and what follow-up is needed. I would also like to thank Dan Johnson and Tom Mahan for their assistance during the inspection.

While reading this letter, please refer to the attached "File Documentation" dated August 9, 1995, and the aerial photo as needed. The file documentation is a summary of the inspection results and the map shows the location and numbering of the city wells. I will be referring to each of the recommended actions in the order presented in the "File Documentation."

1. As required by law, all vested water right claims in South Dakota needed to be validated. This process involved publication of a notice in the newspaper and then action by the Water Management Board. I discovered that the notice for the City of Groton was published incorrectly because the legal description of the wells was inaccurate. As you can see on the aerial photo, the wells are located in section 19, not section 20. We will pay the cost of readvertisement and will forward a copy of the publication to you for your review.
2. The capped wells (Nos. 1 and 2) need to be removed from Vested Water Right No. 1649-3. In order to retain a water right in South Dakota, continuous use (at least once every three years) of the water is necessary. However, wells (Nos. 3 and 4) equipped with functional motors and pumps can be maintained for standby use without forfeiting the water right. If the city has no intention of using the capped wells in the future, then the wells should be permanently plugged. Attached is a copy of the well construction standards which also specifies how to plug wells. Please advise what the city intends to do with the wells.
3. Vested Right No. 1649-3 authorizes use of 0.13 cubic feet of water per second (58 gallons per minute) from well No. 4 and 0.27 cfs (125 gpm) from well No. 3. According to Mr. Johnson, well No. 4 is capable of diverting approximately 58 gpm; however, well No. 3 diverts approximately 300 gpm. This exceeds the permitted diversion rate by 175 gpm (300 actual minus 125 permitted.) The city has several options available to address this situation:

August 14, 1994
Gerald Rix, Mayor of Groton
Page 2 of 2

- ✓ The city can reduce the pump capacity to the permitted amount of 125 gpm,
- ✓ The city apply for a new permit for the additional diversion rate of 175 gpm, or
- ✓ The city can apply for another vested right for the additional diversion rate of 175 gpm provided the well was producing 300 gpm prior to February 28, 1955.

I am enclosing a blank set of application forms with instruction sheets. These forms may be used to apply for either a new permit or for a vested right. Please advise which of these options the city intends to pursue.

4. According to South Dakota Codified Law 46-1-4 and 46-6-14, the waste of water from a large capacity flowing well is not allowable. Steps need to be taken to reduce or shut off the 20 gpm free flow from well No. 3. I believe Mr. Johnson's concern with shutting the well down was the potential for damaging the well if the pump started operating. It is possible to equip artesian wells so that the wells do not flow free and the pump can turn on and off as needed. If the well is used infrequently, it may be easier to disarm the automatic switch and then start the pump on-site after restoring the free flow. Please advise what action the city will take.
5. I have enclosed a set of application forms if the city plans on pumping water from Mud Creek into the golf course holding pond. Permit No. 5249-3 only allows the golf course to be filled when the water level is sufficiently high in Mud Creek to fill the pond by gravity. I would also like to be advised of how much water can be impounded in the golf course pond.

If you have any questions or need assistance with application forms, please don't hesitate to contact me. I will do whatever I can to assist you with these issues.

Sincerely,



Ron Duvall
Natural Resources Engineer
Water Rights Program

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

December 20, 1995

Daniel Johnson, Water Superintendent
City of Groton
PO Box 587
Groton SD 57445

Dear Mr. Johnson:

Thank you for receipt of the two water permit applications on December 14, 1995. I have a few points that need clarification and then we can begin processing your applications.

If you wish, you may respond to my questions in the blank space provided after each question and then return the letter in the postage-paid return envelope. Please call me at (605) 773-3352 if you need assistance. I know this can be confusing and we can go through each question over the phone if it will help you.

Municipal Use Application

1) The \$250.00 application fee is correct if you are applying for a new permit. However, an "Affidavit of Water Use" has been included with your application indicating you intend to claim a vested water right rather than a new permit. The application fee for a vested right is \$15.00. Please understand that a vested water right may be claimed only if the 300 gpm was being used as of February 28, 1955. According to your existing vested right claim, Well No. 3 (125 gpm) has a priority date of 1950.

- Are you intending to apply for a new permit as suggested by your \$250.00 application fee?
Yes ☐ No ☐ If yes, you can skip the following two questions.
- Was the original vested right claim accurate when claiming 125 gpm or was an error made on the original claim?

I believe this was accurate. 125 gpm

- If the original claim is correct, did the pump rate increase on or before February 28, 1955? If the pump rate did increase, please indicate when.

Pumping rate increased to 300 GPM in 1979-1980

(continued)

December 20, 1995
Daniel Johnson, Water Superintendent
Page 2 of 2

Enclosed is your check for \$250.00. If you are planning to apply for a new permit, then please return the enclosed check with your answers. Otherwise, a check for \$15.00 is needed if you plan to claim a vested right.

Golf Course Application

- 1) An application fee of \$150.00 is needed for the golf course application.
- 2) During drought conditions, will well No. 3 be diverted at full capacity (300 gpm) to fill the golf course holding pond? Yes ☒ No ☐ If less than 300 gpm, how much? _____ gpm
- 3) Please identify on the enclosed aerial photo the pumping point locations of water originating from well No. 3 and water originating from runoff and Mud Creek.

In my August 14, 1995, (copy enclosed) letter to Mayor Rix, I also asked some other questions for which I have not received a response.

- What are the city's plans for capped wells No. 1 and 2? If the wells are abandoned, then they need to be plugged as required by state law.

Wells will be plugged, have ~~we~~ contacted Huron Drilling, and plan to contact others. Depending on finances, hopefully wells can ~~be~~ plugged in 1996 or 1997. D.J.

- Have steps been taken to reduce or shut off the 20 gpm free flow from well No. 3? As noted in my earlier letter, construction methods are available to safely allow the pump to turn on and off without damaging the well.

I plan to have well drillers look at this, ~~as~~ when they come to plug the wells. I am also working with Olsen Drilling (Huron) on this matter. Dan Johnson

Again, please contact me at (605) 773-3352 for assistance if it will make this process easier. Thank you for cooperation.

Sincerely,



Ron Duvall
Natural Resources Engineer
Water Rights Program

enclosures

c: ✓ Gerald Rix, Mayor
Tom Mahan



January 11, 1996

Ron Duvall
Natural Resources Engineer
Water Rights Program
Pierre, SD 57501-3181

Dear Ron,

Water from Well #3, is pumped down the storm sewer as indicated on the areial map enclosed. The water is then diverted across Railroad Avenue to the north, through a culvert. The water then flows east to the Golf coarse pond, where it is then pumped into the holding pond.

Mud Creek flows enter the Golf coarse pond when the creek level reaches approximately four feet deep. It then back flows into the holding pond.

Water from Fouth St. drainage, flows through the Golf Coarse, untill it reaches the holding pond. The water then is pumped into the holding pond. When the holding pond reaches it's maximum level, water then flows into Mud Creek through a concrete bridge across Railroad Ave.

I hope this will help explain the flows we use for the irrigation of the Golf Coarse. If you have any questions please contact me.

Sincerely,

Dan Johnson
City Foreman and Water Supt.
City of Groton, S.D.
397-2690



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

January 16, 1996

Daniel D. Johnson
City of Groton
Box 587
Groton SD 57445-0587

Dear Mr. Johnson:

We have received the two water permit applications for the City of Groton. The filing fee for the application to amend Vested Water Right No. 1649-3 is \$250.00. The filing fee for the additional source of water for Water Permit No. 5249-3 is \$150.00. The total for the two applications is \$400.00.

If you have any questions, please contact Ron Duvall or me.

Sincerely,

Karen Schlaak
Environmental Scientist
605 773-3352

RECEIPT

414768

Division of Water Rights

South Dakota Department of Environment and Natural Resources

Pierre, January 26, 19 96

RECEIVED OF Olive Grove Golf Course, Inc, PO Box 617, Groton, SD 57445

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

Fee for Application for Permit No. <u>5905-3</u> to Appropriate Water, to construct and to put water to beneficial use _____	150	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. _____		
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	150 00

By John H. H. [Signature]
Chief Engineer

REPORT ON WATER PERMIT APPLICATIONS NOS. 5902-3 & 5905-3
for the City of Groton
February 22, 1996

Water Permit Application No. 5902-3 proposes to appropriate 0.39 cfs (175 gpm) by increasing the diversion rate authorized by Vested Right No. 1649-3. Vested Right No. 1649-3 authorizes use of 0.13 cfs (58 gpm) from well No. 4 located in the SE 1/4 SW 1/4 of section 19, T123N R60W with a priority date of January 1, 1948 and 0.27 cfs (125 gpm) from well No. 3 located in the NW 1/4 SW 1/4 of section 19, T123N R60W with a priority date of January 1, 1950. Wells Nos. 1 & 2 are capped and will be plugged. This application proposes to increase the water appropriation from well No. 3 from 0.27 cfs to 0.66 cfs (125 gpm to 300 gpm). This notice also serves as readvertisement of the wells authorized by Vested Right No. 1649-3 to identify the correct location of the two wells as described above. The wells were incorrectly advertised in a notice published on August 26 and September 2, 1992 as being located in Section 20. The City of Groton is connected to WEB Rural Water. These wells are used for standby purposes by the City.

Water Permit Application No. 5905-3 proposes additional diversion points to irrigate lands authorized by Water Permit No. 5249-3. Water Permit No. 5249-3 appropriates 1.6 cfs from a holding pond (approximately 20 acre feet of storage) located in the SE 1/4 SE 1/4 of section 19 and the SW 1/4 SW 1/4 of section 20; all in T123N R60W. An investigation of Water Permit No. 5249-3 found up to 30 acres being irrigated with additional water sources from city runoff and city well No. 3 being used for irrigation. This application proposes to pump city runoff flows into the holding pond at a rate of up to 20,000 gpm (44.54 cfs). The diversion point for the city runoff flows and from Mud Creek is located in the SE 1/4 SE 1/4 of section 19, T123N R60W. During low water conditions, ground water may also be pumped (up to 0.66 cfs) from city well No. 3 into the City's storm sewer system and then into the holding pond.

AQUIFER - DAKOTA FORMATION (DKOT)

The Dakota Formation consists of interbedded sandstone and shale. The aquifer is confined and under artesian conditions. The City wells are free flowing wells. The aquifer underlies 1750 square miles and contains an estimated recoverable 25.2 million acre feet of recoverable water in storage in Brown County (Hedges, 1982). The aquifer is areally extensive into all surrounding counties and into North Dakota. In fact, the storage capacity of the Dakota Formation in South Dakota is estimated at 1.1 billion acre feet (Schoon, 1971).

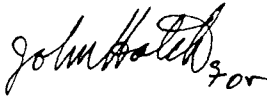
The Water Rights Program does measure a Dakota Formation observation well ED-85A which is located about 32 miles west of Groton. Water levels for this well have remained nearly constant or even risen slightly since the well was drilled (Water Rights, 1996). Generally, however, water levels for the Dakota Formation have declined for many years. Schoon reports a decline of 300 to 350 feet in the James River Lowlands and attributed most of the decline to improperly constructed and maintained wells. Most of the decline occurred in the early part this century.

REVIEW OF EXISTING WATER PERMITS/RIGHTS

There are no other existing water permits/rights in this area except for the rights belonging to the City of Groton. The city will be plugging wells Nos. 1 & 2 and will be maintaining wells Nos. 3 & 4 for backup purposes. There are numerous domestic wells in the area. Interference should not be a concern. The city will only be using the well for irrigation purposes when necessary. Since the city is supplied with WEB Rural Water the overall water use from the Dakota Formation will be less. On the occasion when the city would pump at a rate of 300 gpm, drawdown will be created but this should not adversely affect the water supply from the aquifer. It may be necessary to lower or install pumps if the water level is lowered below the ground surface or below the pump.

CONCLUSIONS

1. Water is available from the Dakota Formation.
2. The aquifer is confined and under artesian conditions. The two remaining city wells are free flowing at the land surface. These wells must be controlled and shut in when not in use in order to prevent the waste of water.
3. Interference is not expected to be a concern. Drawdown will occur as a result of this diversion but this should not be significant.
4. The city of Groton will be plugging wells Nos. 1 & 2.
5. These applications are a result of an inspection of the water permits for the city of Groton. Approval of these applications will allow licensing of the water permits for the city to reflect the as built water distribution system. The maximum ground water diversion from the Dakota Formation would be 0.66 cfs.



James A Goodman
Natural Resources Engineer

BIBLIOGRAPHY

- Hedges, L.S., etal, 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, for US Army Corps of Engineers, SD DENR, SDGS, Vermillion, SD, 57069.
- Schoon, R.A., 1971, Geology and Hydrology of the Dakota Formation in South Dakota, Report of Investigations No. 104, SDGS, Vermillion, SD, 57069.
- Water Rights, 1996, Unpublished Observation Well Records for Dakota Formation, SD DENR, Division of Environmental Services, Water Rights Program, Pierre, SD, 57501.

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 5905-3**

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. 5905-3, City of Groton, c/o Daniel D. Johnson, Box 587, Groton, SD 57445-0587

The Chief Engineer is recommending APPROVAL of Application No. 5905-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) in the public interest with the following qualifications:

1. Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be by-passed.
2. This permit is approved subject to the irrigation water use questionnaire being submitted each year.
3. Well No. 3 under this Permit shall be valved and the flow reduced to the amount needed or to a minimum when not being used (directly or for storage purposes).

See report on application for additional information.



JOHN HATCH, Chief Engineer
February 23, 1996

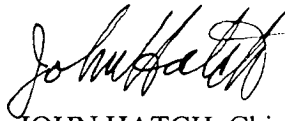
**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 5902-3, City of Groton**

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. 5902-3, City of Groton, c/o Daniel D. Johnson, Box 587, Groton, SD 57445-0587

The Chief Engineer is recommending APPROVAL of Application No. 5902-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion has been developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) in the public interest with the following qualifications:

1. The wells approved under this Permit will be 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. The wells approved under this Permit shall be valved and the flow reduced to the amount needed or to a minimum when not being used (directly or for storage purposes).
3. This Permit is subject to Well Nos. 1 and 2 being plugged in accordance with Water Management Board Rules, Chapter 74: 02:04.

See report on application for additional information.



JOHN HATCH, Chief Engineer
February 23, 1996

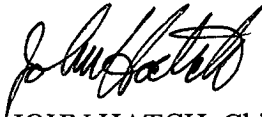
**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 5905-3**

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. 5905-3, City of Groton, c/o Daniel D. Johnson, Box 587, Groton, SD 57445-0587

The Chief Engineer is recommending APPROVAL of Application No. 5905-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) in the public interest with the following qualifications:

1. Low flows as needed for downstream domestic use, including livestock watering and prior water rights must be by-passed.
2. This permit is approved subject to the irrigation water use questionnaire being submitted each year.
3. Well No. 3 under this Permit shall be valved and the flow reduced to the amount needed or to a minimum when not being used (directly or for storage purposes).

See report on application for additional information.



JOHN HATCH, Chief Engineer
February 23, 1996



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

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

February 27, 1996

City of Groton
%Daniel D. Johnson
Box 587
Groton, SD 57445-0587

Dear Mr. Johnson:

Water Permit Application Nos. 5902-3 and 5905-3 for municipal use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice of hearing has been sent to the Publisher of the Groton Independent printed at Groton, SD (Ph # (605) 397-2676). For your information, a copy of the notice, the recommendation of the Chief Engineer and a report 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 to authorize publication of your Notice of Hearing and to arrange for payment. Early contact with the paper can eliminate delays. The publisher has been instructed to publish your notice once each week for two consecutive weeks with the last publication to occur twenty days before the board meeting. The newspaper has 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 recommendation, 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 57501-3181

February 27, 1996

Groton Independent
Box 588
Groton, SD 57445-0588

ATTENTION: Legal Department

Enclosed is a Notice of Hearing on Application Nos. 5902-3 and 5905-3 to be published twice. Please publish the first notice on March 7, 1996, with the second publication 7 days later.

The APPLICANT MUST VERIFY TO YOU THAT THE NOTICE IS TO BE PUBLISHED, before you make the first publication. Please BILL the APPLICANT for the cost of publication. The APPLICANT is City of Groton, %Daniel D. Johnson, Box 587, Groton, SD 57445-0587 (Ph # (605) 397-8422).

A copy of BOTH publications must be SENT to the WATER RIGHTS PROGRAM. IMMEDIATELY return the FIRST publication with the FIRST Transmittal form on the bottom of this page. The first copy is needed to check the publication for errors so any corrections can be made in the second publication. Publication errors can invalidate the public notice and cause the applicant costly delays.

Please be sure the SECOND publication is returned IMMEDIATELY with the enclosed Proof of Publication form. DO NOT WAIT until the end of the month or the billing cycle. No action may be taken on the permit application until proof of publication has been received.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

-----CUT HERE-----

FIRST TRANSMITTAL NOTICE

TO: Eric Gronlund
Water Rights Program
Joe Foss Building
Pierre SD 57501-3181

No. _____

Date _____

We are in receipt of your letter of _____ enclosing Notice of Hearing to Appropriate Water by Application No. _____ which was first published in our issue of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name

Newspaper

Instruction to Newspaper - Publish first Notice on March 7, 1996, with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NOS. 5902-3 and 5905-3 to Appropriate Water
and Readvertisement of Vested Right No. 1649-3

Notice is given that the City of Groton, Box 587, Groton, SD 57445-0587 has filed applications for the following water permit applications:

Water Permit Application No. 5902-3 requests to appropriate 0.39 cubic feet of water per second (cfs) [175 gallons per minute (gpm)] by increasing the diversion rate authorized by Vested Right No. 1649-3. Vested Right No. 1649-3 authorizes use of 0.13 cfs (58 gpm) from well no. 4 located in the SE 1/4 SW 1/4 Section 19-T123N-R60W with a priority date of January 1, 1948, and 0.27 cfs (125 gpm) from well no. 3 located in the NW 1/4 SW 1/4 Section 19-T123N-R60W with a priority date of January 1, 1950. Well nos. 1 & 2 are capped and will be plugged. This application proposes to increase the water appropriation from well no. 3 from 0.27 cfs to 0.66 cfs (125 gpm to 300 gpm). This notice also serves as readvertisement of the wells authorized by Vested Right No. 1649-3 to identify the correct location of the two wells as described above. The wells were incorrectly advertised in a notice published on August 26 and September 2, 1992, as being located in Section 20. The City of Groton is connected to WEB Rural Water. These wells are used for standby purposes by the City.

Water Permit Application No. 5905-3 requests additional diversion points to irrigate lands authorized by Water Permit No. 5249-3. Water Permit No. 5249-3 appropriates 1.6 cfs from a holding pond (approximately 20 acre-foot storage capacity) located in the SE 1/4 SE 1/4 Section 19 and the SW 1/4 SW 1/4 Section 20 to irrigate 112 acres of a golf course located in the SE 1/4 Section 19 and the SW 1/4 SW 1/4 Section 20; all in T123N-R60W. An investigation of Permit No. 5249-3 found up to 30 acres being irrigated with additional water sources from city runoff and city well no. 3 being used for irrigation. This application proposes to pump city runoff flows into the holding pond as well as flood flows from Mud Creek. During high runoff conditions, water may be pumped into the holding pond at a rate of up to 20,000 gpm (44.54 cfs). The diversion point for the city runoff flows and from Mud Creek is located in the SE 1/4 SE 1/4 Section 19-T123N-R60W. During low water conditions, water may also be pumped (up to 0.66 cfs) from well no. 3 located in the NW 1/4 SW 1/4 Section 19-T123N-R60W, diverted through the City's storm sewer system and into the holding pond.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 5902-3 and 5905-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the chief engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the chief engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and chief engineer. The applicant must file a petition if contesting the chief engineer's recommendation. 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 March 25, 1996.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Nettie H. Myers, Secretary, Department of Environment and Natural Resources.

PROOF OF PUBLICATION

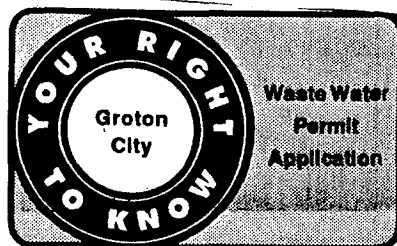


STATE OF SOUTH DAKOTA)
County of Brown) SS

I, Spurge Walter

certify that the attached printed Notice was

taken from the The Groton Independent



printed and published in Groton, SD

County of Brown and State of

South Dakota. The notice was published in the newspaper on the following two dates:

3-7-96

3-14-96

Cost of Printing: 156.20

Spurge Walter
(Signature)

Office Manager
(Title)

3-14-96
(Date Signed)

Notice of Application Nos. 5902-3 and 5905-3 to Appropriate Water and Readvertisement of Vested Right No. 1649-3

Notice is given that the City of Groton, Box 587, Groton, SD 57445-0587 has filed applications for the following water permit applications:

Water Permit Application No. 5902-3 requests to appropriate 0.39 cubic feet of water per second (cfs) [175 gallons per minute (gpm)] by increasing the diversion rate authorized by Vested Right No. 1649-3. Vested Right No. 1649-3 authorizes use of 0.13 cfs (58 gpm) from well no. 4 located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 19-T123N-R60W with a priority date of January 1, 1948, and 0.27 cfs (125 gpm) from well no. 3 located in the NW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 19-T123N-R60W with a priority date of January 1, 1950. Well nos. 1 & 2 are capped and will be plugged. This application proposes to increase the water appropriation from well no. 3 from 0.27 cfs to 0.66 cfs (125 gpm to 300 gpm). The notice also serves as readvertisement of the wells authorized by Vested Right No. 1649-3 to identify the correct location of the two wells as described above. The wells were incorrectly advertised in a notice published on August 26 and September 2, 1992, as being located in Section 20. The City of Groton is connected to WEB Rural Water. These wells are used for standby purposes by the City.

Water Permit Application No. 5905-3 requests additional diversion points to irrigate lands authorized by Water Permit No. 5249-3. Water Permit No. 5249-3 appropriates 1.6 cfs from a holding pond (approximately 20 acre-feet storage capacity) located in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 19 and the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 20 to irrigate 112 acres of a golf course located in the SE $\frac{1}{4}$ Section 19 and the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 20; all in T123N-R60W. An investigation of Permit No. 5249-3 found up to 30 acres being irrigated with additional water sources from city runoff and city well

no. 3 being used for irrigation. This application proposes to pump city runoff flows into the holding pond as well as flood flows from Mud Creek. During high runoff conditions, water may be pumped into the holding pond at a rate of up to 20,000 gpm (44.54 cfs). The diversion point for the city runoff flows and from Mud Creek is located in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 19-T123N-R60W. During low water conditions, water may also be pumped (up to 0.66 cfs) from well no. 3 located in the NW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 19-T123N-R60W, diverted through the City's storm sewer system and into the holding pond.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 5902-3 and 5905-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the chief engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the chief engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and chief engineer. The applicant must file a petition if contesting the chief engineer's recommendation. 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 March 25, 1996.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Nettie H. Myers, Secretary, Department of Environment and Natural Resources.

(0307.0314)



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

JUL 2 1996

Anita Lowary, Finance Officer
City of Groton
P.O. Box 587
Groton, SD 57445-0587

Dear Ms. Lowary:

Enclosed are Water Permit Nos. 5902 and 5905-3 authorizing your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permits.

The final inspection has been completed on these Permits, and we are ready to issue the Water Licenses. Statutes require we charge \$50 per license (\$100 total) for the inspection and issuance of the final papers. Upon receipt of this \$100 fee, the Water Licenses will be sent to you.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Program
605 773-3352

enclosures

RECEIPT

415012

Division of Water Rights

South Dakota Department of Environment and Natural Resources

Pierre, _____ July 15, 19 96

RECEIVED OF City of Groton, P.O. Box 587, Groton, SD 57445-0587

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 _____		
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. <u>5905-3</u>	50	00
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	50 00

By John Hatch 
Chief Engineer

Permit No. 5905-3
James River - Water District

Report of Examination of Works and/or Application of Water to Beneficial Use

TO: Chief Engineer, Water Rights Program, DENR, Foss Bldg., Pierre, SD 57501

I have this day, May 10, 1995, made a thorough examination of the water use system constructed by the City of Groton of 209 N Main, Groton SD 57445 holder of Permit No. 5905-3 and 5249-3, bearing the priority of December 14, 1995 and October 3, 1988, respectively, authorizing the diversion of 0.66 cu. ft. per second (ground water - well no. 3) and up to 44.54 cfs (Mud Creek/city runoff) to fill the holding pond and storage of 20 acre-feet of the waters of Mud Creek, city runoff, and ground water (Dakota Formation) for irrigation purposes, in Brown County.

I have to report on the conditions of the same as follows:

A. Works used to divert the water: Holding pond partially filled by gravity from runoff/Mud Creek

Well No. 3:

30 hp submersible diverting 300 gpm @ 60 psi

Diversion into pond:

Crisafulli-style pumps powered by tractors
diverting up to 20,000 gpm

Irrigation pumps:

- 1) Make Berkeley low pressure (see TORO spec sheet in 5249-3)
- 2) Size 15 and 20 hp diverting 250 gpm @ 100 PSI (135,000 gallons during pump cycle)

B. Works used to transport water to place of use:

- 1) Type PVC
- 2) Size 1.5, 2, 3, 4 inches
- 3) Length 16,300 feet

C. Works used to apply water to beneficial use:

TORO sprinklers (see spec sheet in 5249-3)

The system is in the following condition good. The points of diversion are located Well No. 3: 825 feet E and 2,550 feet N from SW corner section 19 (NW1/4 SW1/4); Mud Creek/city runoff/well flow into holding pond and diversion from holding pond to irrigated land: near SE corner section 19; all in T123N-R60W. The works are capable of diverting and conveying to the place of use 0.56 cu. ft. per second of water and storing 20 acre-feet of water which is to be used for irrigation. Water has been put to beneficial use to the maximum extent as follows:

Irrigating 30 acres of a 112 acre golf course located south of US Highway 12 in the SE1/4 section 19 and SW1/4 SW1/4 section 20; all in T123N-R60W

comprising a total of 30 acres of land and the license should be issued for 0.56* cfs and 20 acre-feet of storage.

Applicable permit qualifications have been complied with: Yes ☒ No

Exceptions to compliance are: none Date report completed: March 28, 1996



Ron Duvall
 Natural Resources Engineer
 DENR, Water Rights Program

*Based on 1 cfs per 70 acres, the diversion rate allowed for 30 acres is 0.42 cfs. However, this permit can be licensed for a diversion rate of 0.56 cfs due to time constraints on application of water. Use of the greater diversion rate is allowable pursuant to an amendment to SDCL 46-5-6 which becomes effective July 1, 1996.

Permit No. 5249-3 can be incorporated into No. 5905-3.

FIELD INVESTIGATION REPORT FOR PERMIT NO. 5905-3

DATE OF INVESTIGATION:	May 10, 1996
NAME & ADDRESS OF INVESTIGATION CONTACT/ RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE	Tom Mahan & Dan Johnson, Water Superintendent
NAME & ADDRESS OF PERMIT HOLDER	City of Groton, 209 N Main
DIVERSION POINT LEGAL LOCATION	Well No. 3: 825 feet E and 2,550 feet N from SW corner sec 19-T123NR60W (NW $\frac{1}{4}$ SW $\frac{1}{4}$); Mud Creek/city runoff at point in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec 19

Other permit(s) associated with the project: 5249-3

WELL INFORMATION:

- 1) Well Drilling Firm: Norbeck
- 2) No. of Wells 1
- 3) Depth(s) 990 feet
- 4) Well log is available N
- 5) Comment: well drilled in 1950

Casing:

- 1) Diameter 10 inches
- 2) Length 960 feet
- 3) Type concrete
- 4) Capacity 300 GPM

Screen:

- 1) Type steel
- 2) Length 30 feet
- 3) Static water level flowing well

Well Motor & Pump:

- 1) Make unknown
- 2) Model unknown
- 3) Size 30 hp

IRRIGATION PUMP AND EQUIPMENT:

- 1) Make Berkeley low pressure (see TORO spec sheet in 5249-3)
- 2) Size 15 and 20 hp diverting 250 gpm @ 100 PSI (135,000 gallons during pump cycle)
- 3) Sprinklers TORO (see spec sheet in 5249-3)

DIVERSION TO HOLDING POND:

- 1) Pump up to 20,000 gpm using crisafulli-style pumps powered by tractors

POND CAPACITY:

- 1) Size Approx 600 feet by 250 feet (see blueprint) with estimated 20 acre feet capacity

DISTRIBUTION LINES OR CANALS:

- 1) Type PVC
- 2) Size 1.5, 2, 3, 4 inches
- 3) Length 16,300 feet

CHEMIGATION EQUIPMENT:

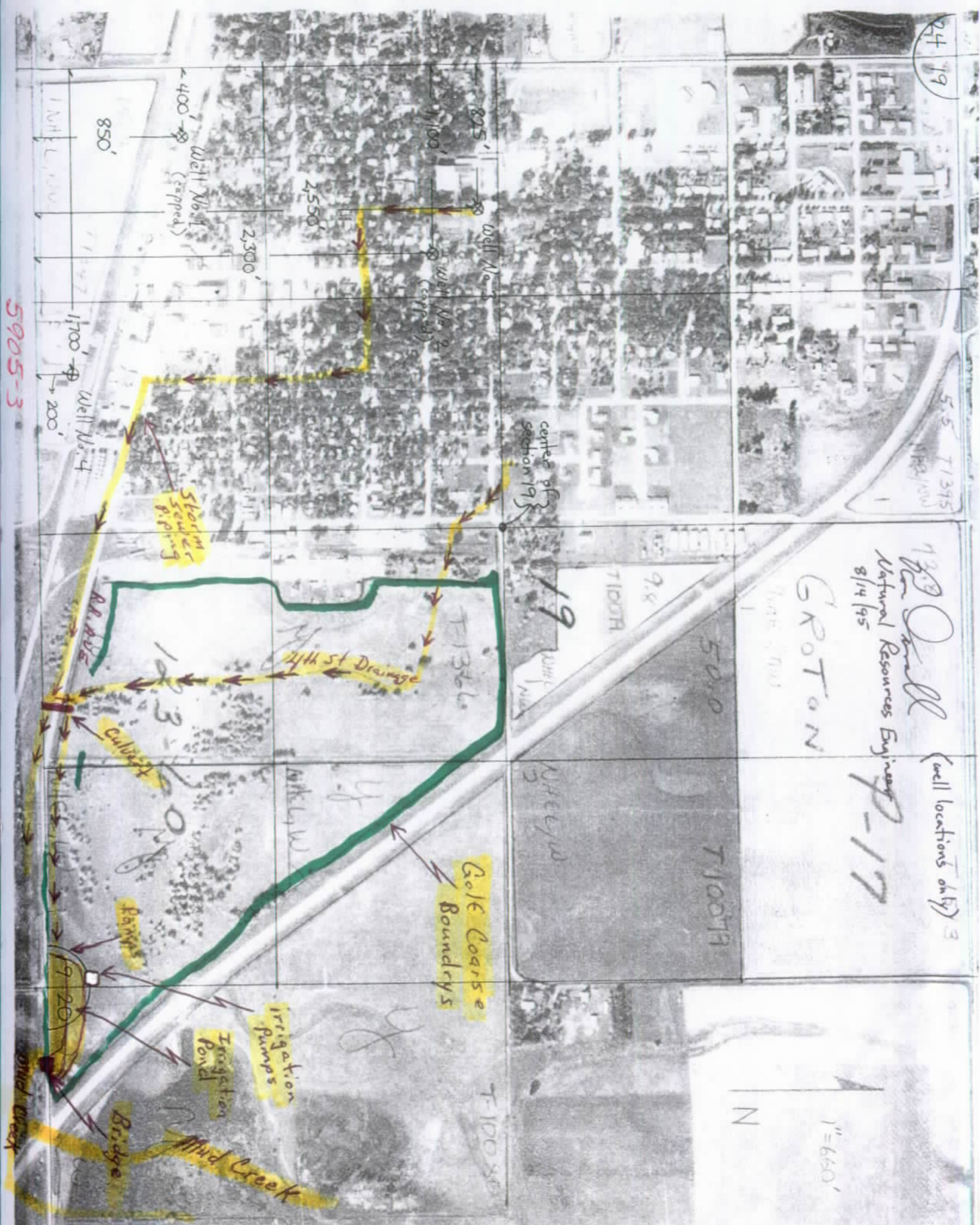
- 1) Does chemigate N

PERMIT QUALIFICATIONS:

- 1) Special qualifications to permit being abided by Y
- 2) All structures, wells and lands on map Y
- 3) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period
Y

5.5 T1395
MFA/100

GROTON

 $1'' = 6450'$ 

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 5905-3

(1) The City of Groton, PO Box 587, Groton SD 57445-0587 made Application No. 5905-3, December 14, 1995 for additional diversion points to irrigate lands, authorized by Water Permit No. 5249-3, located in Brown County, South Dakota for irrigation purposes. Permit No. 5905-3, with a priority date of December 14, 1995 was approved March 25, 1996 and issued to the applicant for diversion of water with construction of the described water supply system completed and the application to beneficial use of said water completed.

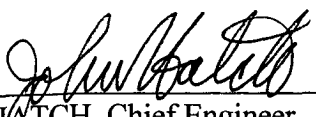
Water Permit No. 5249-3 appropriates 1.6 cubic feet of water per second (cfs) from a holding pond (approximately 20 acre-feet storage capacity) to irrigate 112 acres of a golf course. An investigation of Permit No. 5249-3 found up to 30 acres being irrigated with additional water sources from city runoff and city Well No. 3 being used for irrigation. Water Permit No. 5905-3 allows the pumping of city runoff flows into the holding pond as well as flood flows from Mud Creek. During high runoff conditions, water may be pumped into the holding pond at a rate of up to 20,000 gpm (44.54 cfs). During low water conditions, water may also be pumped (up to 0.66) from Well No. 3 and diverted through the City's storm sewer system and into the holding pond.

The applicable portions of Water Permit No. 5249-3 have been incorporated into this Water License No. 5905-3.

(2) It is certified that the applicant 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 0.56 cubic feet of water per second and store 20 acre-feet of water for beneficial use. The location of the diversion points are: Well No. 3: 825 feet east and 2,550 feet north from the southwest corner of Section 19 (NW 1/4 SW 1/4); Mud Creek/city runoff/well flow into holding pond and diversion from holding pond to irrigated land: near the southeast corner of Section 19; all in T123N-R60W.

(3) The applicant has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to irrigate the following land: 30 acres of a 112 acre golf course located south of US Highway 12 in the SE 1/4 Section 19 and SW 1/4 SW 1/4 Section 20; all in T123N-R60W.

(4) Pursuant to South Dakota Water Law 46-5-30.1 the City of Groton, PO Box 587, Groton SD 57445-0587 the holder and/or owner of Incorporated Water Permit No. 5905-3 is issued a license to appropriate water, the right to use 0.66 cfs (groundwater-Well No.3) and up to 44.54 cfs (Mud Creek/city runoff) to fill the holding pond (20 acre-feet storage capacity) with priority dates of October 3, 1988 and December 14, 1995 from the location specified in (2) of this license. The water to be conducted to and upon lands specified in (3) of this license for the purpose of irrigation. This license is subject to any limitations or qualifications listed in Incorporated Water Permit No. 5905-3 and subject to South Dakota State Law.



JOHN HATCH, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JUL 29 1996

date





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

JUL 29 1996

City of Groton
Janice Bren, Finance Officer
Box 587
Groton SD 57445-0587

Dear Ms. Bren:

Enclosed are Water License Nos. 5902-3, 5905-3, Vested Right Water License No. 1649-3 and receipts for the payment assessed for the inspection and issuance of the license. These are the final documents which complete the process of obtaining water rights for the City of Groton.

The applicable portions of Water Permit No. 5249-3 have been incorporated into Water License No. 5905-3.

As long as the City of Groton uses the water beneficially, as stated in the Water Licenses, State Water Law provides the City with a continuing right to use the water.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Program
605 773-3352

enclosures

1998 WATER MANAGEMENT BOARD IRRIGATION QUESTIONNAIRE
PLEASE FILL OUT AND RETURN BEFORE DECEMBER 1, 1998

5165-3
CITY OF GROTON
TOWN NAHON
PO BOX 587
GROTON, SD 57445 0187

CHANGES TO ADDRESS LABEL, IF ANY:
Telephone No. 391.2311

COMPLETE AND RETURN THIS FORM TO THE WATER RIGHTS PROGRAM AT 815 E. CAPITOL, PIERRE, SD 57501-3191 (605) 773-2382

IS SYSTEM CONSTRUCTED? YES ☒ NO ☐ DID YOU IRRIGATE IN 1997? YES ☒ NO ☐

IF YES, NUMBER OF ACRES IRRIGATED 23 IF NO, LIST REASON(S) IN COMMENT SECTION
IS LAND ENROLLED IN CRP? YES ☐ NO ☒ IF YES, THROUGH WHAT YEAR? _____

DID YOU CHEMIGATE IN 1997? YES ☐ NO ☒

SOURCE OF WATER Well off

TYPE OF SYSTEM (CHECK ALL THAT APPLY)

CENTER PIVOTS ☐ TOWNLINES ☐ BIG GUN ☐

FLOOD ☐ SPRINKLERS ☒ OTHER ☐

COMMENT SECTION:

Conf. Bruce



THE PORTION OF THE FORM FOR REPORTING ACRES IRRIGATED IS ON THE BACK OF THIS PAGE.
LISTED BELOW ARE TWO EXAMPLES OF HOW TO COMPLETE THE FORM:

EXAMPLE 1: IN JUNE & JULY, 130 ACRES WERE IRRIGATED USING A PIVOT SYSTEM (70 ACRES OF CORN & 60 ACRES OF ALFALFA). THE PUMP RATE OF THE PIVOT IS 800 GALLONS PER MINUTE AND YOU PUMPED 8 DAYS (8 X 24 HOURS PER DAY) ON THE CORN AND 22 DAYS ON THE ALFALFA.

MONTH	CROP	ACRES	PUMP RATE	# DAYS	AVERAGES DAY
JUNE	CORN	70	800 GPM	8	24
JULY	ALFALFA	60	800 GPM	10	24
JULY	ALFALFA	60	800 GPM	12	24

EXAMPLE 2: IN JUNE, 40 ACRES OF ALFALFA WERE IRRIGATED (USING GATED PIPE @ 3000 GPM) FOR 5 DAYS - 24 HOURS PER DAY. 60 ACRES OF BEANS WERE IRRIGATED (USING BIG GUN @ 380 GPM) FOR 10 DAYS AT 24 HOURS PER DAY.

MONTH	CROP	ACRES	PUMP RATE	# DAYS	AVERAGES DAY
JUNE	ALFALFA	40	3000 GPM	5	24
JULY	BEANS	60	380 GPM	10	24

PLEASE SPECIFY A ACTUAL IRRIGATION HOURS OR KILOWATT HOURS ARE BEING REPORTED. FOR KILOWATT HOURS, INCLUDE DEPTH TO WATER & SYSTEM PRESSURE IN COMMENT SECTION.

MONTH IRRIGATED	CROP TYPE	ACRES IRRIGATED	PUMP RATE/GPM	DAYS PER MONTH	AVERAGES PER DAY
-----------------	-----------	-----------------	---------------	----------------	------------------

MARCH					
APRIL					
MAY	Alfalfa	23	400 GPM	30	8
JUNE	"	"	"	"	"
JULY	"	"	"	"	"
AUGUST	"	"	"	"	"
SEPTEMBER	"	"	"	"	"
OCTOBER	"	"	"	20	8

IF MORE ROOM IS NEEDED, PLEASE INCLUDE THE INFORMATION ON A BLANK SHEET OF PAPER

1999 WATER MANAGEMENT BOARD IRRIGATION QUESTIONNAIRE
PLEASE FILL OUT AND RETURN BEFORE DECEMBER 1, 1999

gm

5905-3 CITY OF GROTON TOM MAHON PO BOX 587 GROTON SD 57445 0587	CHANGES TO ADDRESS LABEL , IF ANY: Telephone No. _____
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COMPLETE AND RETURN THIS FORM TO THE WATER RIGHTS PROGRAM AT 523 E CAPITOL, PIERRE, SD 57501-3181 (605) 773-3352

IS SYSTEM CONSTRUCTED? YES ☒ NO ☐ DID YOU IRRIGATE IN 1999? *YES ☒ *NO ☐

* IF YES, NUMBER OF ACRES IRRIGATED 23 *IF NO, LIST REASON(S) IN COMMENT SECTION

IS LAND ENROLLED IN CRP? YES ☐ NO ☒ IF YES, THROUGH WHAT YEAR? _____

DID YOU APPLY CHEMICALS OR FERTILIZER THROUGH THE SYSTEM IN 1999? YES ☐ NO ☒

SOURCE OF WATER run off & ground water & local wells

TYPE OF SYSTEM (CHECK ALL THAT APPLY):

CENTER PIVOTS _____ TOWLINES _____ BIG GUN _____

FLOOD _____ SPRINKLERS ☒ OTHER _____

COMMENT SECTION:



THE PORTION OF THE FORM FOR REPORTING ACRES IRRIGATED IS ON THE BACK OF THIS PAGE.
LISTED BELOW ARE TWO EXAMPLES OF HOW TO COMPLETE THE FORM:

EXAMPLE 1: IN JUNE & JULY, 130 ACRES WERE IRRIGATED USING A PIVOT SYSTEM (70 ACRES OF CORN & 60 ACRES OF ALFALFA). THE PUMP RATE OF THE PIVOT IS 800 GALLONS PER MINUTE AND YOU PUMPED 8 DAYS (@ 24 HOURS PER DAY) ON THE CORN AND 22 DAYS ON THE ALFALFA:

MONTH	CROP	ACRES	PUMP RATE	# DAYS	AVE/HRS DAY
JUNE	CORN	70	800 GPM	8	24
	ALFALFA	60	800 GPM	10	24
JULY					
	ALFALFA	60	800 GPM	12	24

EXAMPLE 2: IN JUNE, 40 ACRES OF ALFALFA WERE IRRIGATED (USING GATED PIPE @ 3000 GPM) FOR 5 DAYS - 24 HOURS PER DAY; 60 ACRES OF BEANS WERE IRRIGATED (USING BIG GUN @ 380 GPM) FOR 10 DAYS AT 24 HOURS PER DAY:

JUNE	ALFALFA	40	3000 GPM	5	24
	BEANS	60	380 GPM	10	24

PLEASE SPECIFY IF ACTUAL IRRIGATION HOURS OR KILOWATT HOURS ARE BEING REPORTED. FOR KILOWATT HOURS, INCLUDE DEPTH TO WATER & SYSTEM PRESSURE IN COMMENT SECTION.

MONTH IRRIGATED	CROP TYPE	NUMBER OF ACRES IRRIGATED	PUMP RATE IN GALLONS PER MINUTE	DAYS PER MONTH WATER WAS APPLIED	AVERAGE HOURS PER DAY
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MARCH					
APRIL	grass	23	400	10	8
MAY	grass	23	400	20	8
JUNE	grass	23	400	25	8
JULY	grass	23	400	25	8
AUGUST	grass	23	400	30	8
SEPTEMBER	grass	23	400	20	8
OCTOBER	grass	23	400	15	8

IF MORE ROOM IS NEEDED, PLEASE INCLUDE THE INFORMATION ON A BLANK SHEET OF PAPER

85.4
26

WATER RIGHTS PROGRAM -- FILE DOCUMENTATION

NAME & ADDRESS: City of Groton, PO Box 587, Groton, SD 57445-0587

DATE: June 2, 2000

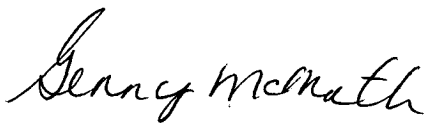
TELEPHONE: 605 397-8422

RE: pumping rates for the golf course

COMMENTS:

I called and spoke with Anita at the city office to ask who I should call concerning the irrigation of the golf course and more importantly, who ever would have completed the annual irrigation questionnaire. I had questions on the pump rate they reported using.

She said she would find out the information and call back. When she called back, she indicated she spoke with the plumber who installed the pumps. He told her they use 300 gpm when pumping into the pond and 400 gpm when diverting out of the pond to the acres irrigated. Anita said that the guy told her the system has not been changed since it was installed and has always been operated in this method.



Genny McMath
Environmental Scientist



5905-3

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

January 24, 2006

NOTICE

TO: CITY OF GROTON, TOM MAHON, PO BOX 587, GROTON, SD 57445 0587

FROM: Ron Duvall, Natural Resources Engineer
for Garland Erbele, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2005 Irrigation Questionnaire(s)

Our records indicate that the 2005 Irrigation Questionnaire(s) has not been submitted for Permit No(s) 5905-3. The request for the Questionnaire was dated October 28, 2005. The Water Management Board has directed that owners of water permits who have not submitted the 2005 Irrigation Questionnaire(s) be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine what action is to be taken for violation of Water Permit No(s) 5905-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held at 10:30 am, March 2, 2006 in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 5905-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaire(s) is(are) received in this office on/or before **February 24, 2006**, you will no longer be in violation of your permit and your name will be deleted from the Board agenda. If you have questions or need assistance in completion of the irrigation questionnaire(s), please contact Genny McMath at (605) 773-3352.

NOTE: Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.

5905-3



Track & Confirm

Current Status

You entered 2303 2160 0000 0799 4961

Your item was delivered at 9:11 am on January 25, 2006 in GROTON, SD 57445. The item was signed for by P LOCKE.

[Shipment Details >](#)

Track & Confirm

Enter label number:

[Track & Confirm FAQs](#)

Notification Options

▶ Track & Confirm by email

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SIGNATURE CONFIRMATION NUMBER: 2303 2160 0000 0799 4961

CITY OF GROTON
TOM MAHON
PO BOX 587
GROTON SD 57445 0587

Waiver of Signature ☐ YES ☐ NO

Postmark
Here

POSTAL CUSTOMER:
Keep this receipt. For Inquiries:
Access internet web site at
www.usps.com
or call 1-800-222-1811

☐ Priority Mail™ Service
☐ First-Class Mail® parcel
☐ Package Services parcel



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

January 30, 2006

5905-3

Tom Mahon
City of Groton
PO Box 587
Groton SD 57445-0587

Dear Mr. Mahon:

I am writing to acknowledge receipt of your 2005 irrigation questionnaire. You may disregard the January 24, 2006, "Notice" concerning reporting requirements for Water Right No. 5905-3.

The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

If you have any questions, please contact me.

Sincerely,

Genny McMath
Environmental Scientist
Water Rights Program
(605) 773-3352



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

May 2, 2024

5905-3

City of Groton
c/o Tom Mahan
PO Box 587
Groton SD 57445

Dear Mr. Mahan:

I am writing in regard to Water Right No. 5905-3. The water right authorizes diversion of water from one well completed into the Dakota Aquifer, as well as Mud Creek and natural runoff, for the irrigation of 30 acres in the SE $\frac{1}{4}$ Section 19 & SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 20; all in T123N, R60W, Brown County

In reviewing your 2023 irrigation questionnaire, we have found discrepancies in the amount of water used and have some concerns. Enclosed is a copy of your questionnaire for reference purposes.

Water Right No. 5905-3 allows you to use up to 2 acre-feet (ac-ft) (24 inches) of water, per acre, per year. On the questionnaire you reported substantially more water use. The following information is what was reported and what is authorized:

- 23 acres irrigated
- Reported water use – 91.3 ac-ft of water (approximately 47.5 inches)
- Authorized water use – 46 acre-feet (23 acres x 2 ac-ft per year)

We realize that water use depends greatly on climactic conditions and may vary year to year. However, it is very rare that irrigators come close to the 24 inches per acre that is authorized. Typical water use is between 8 and 12 inches per acre. Often, irrigators do not keep track of their days or hours actually pumped and estimate numbers for the questionnaires in an effort to get them completed and back in on time. While we appreciate returning the forms in a timely manner each year, we need the forms to reflect accurate information to ensure everyone is limiting their use to the amount of water appropriated to them.

The information we receive each year from irrigators across the state is very valuable. The water use data supplied by irrigators is one of the tools we use to help determine whether an aquifer or stream is nearing full appropriation.

If you do in fact apply as much water as claimed on your questionnaire, you are exceeding the limits of your water right and will have to reduce your discharge to stay within the authorized limit. If you simply estimated your water use, we ask that you please ensure the information reported is as accurate as possible. As stated before, the information you provide to us is very valuable. If you have any questions, please contact me.

Sincerely,

Amanda Dewell
Water Rights Program
605 773-3352
Amanda.Dewell@state.sd.us

enclosure



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**
JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

January 14, 2025

NOTICE

TO: CITY OF GROTON, TOM MAHAN, PO BOX 587, GROTON, SD 57445 0587

FROM: Ron Duvall, Engineer III
for Eric Gronlund, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2024 Irrigation Questionnaire(s)

Our records indicate your 2024 Irrigation Questionnaire(s) has not been submitted for Permit No(s) 5905-3 & 8009-3. The request for the Questionnaire was dated October 23, 2024. The Water Management Board has directed owners of water permits who have not submitted the 2024 Irrigation Questionnaire(s) be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine what action is to be taken for violation of Water Permit No(s) 5905-3 & 8009-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held on **Wednesday, March 5, 2025, at 9:30 am (Central Time)** in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 5905-3 & 8009-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaire(s) is (are) received in this office before the **March 5, 2025**, hearing you will no longer be in violation of your permit and your name will be removed from the Board agenda. Enclosed are additional questionnaire(s) for your use. If you have questions or need assistance, please contact Amanda Dewell at (605) 773-3352 or email at amanda.dewell@state.sd.us. **If you prefer, you can complete the questionnaire online at the following link: <https://danr.sd.gov/iq> using this password: NQGLSI**

NOTE: Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

January 30, 2025

5905-3
8009-3

City of Groton
c/o Tom Mahan
PO Box 587
Groton SD 57445

Dear Mr. Mahan:

I am writing to acknowledge the receipt one of the City's 2024 irrigation questionnaires.

You may disregard the January 14, 2025, "Notice" concerning the reporting requirements for Water Permit No(s). 5905-3. The information was received prior to the March 5, 2025, Water Management Board meeting and the above listed permit number has been removed from the agenda.

However, the irrigation questionnaire for Permit No. 8009-3, which was mailed to the above address (attn: Ms. Lowery, Finance Officer), has not been returned and is still scheduled to be reviewed for suspension or cancellation by the Board.

If you have any questions or concerns, please contact me.

Sincerely,

Amanda Dewell
Permitting Administrator
Water Rights Program
605 773-3352
Amanda.Dewell@state.sd.us

Cc: City of Groton, c/o Anita Lowary, PO Box 587, Groton SD 57445



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

May 6, 2026

City of Groton
C/O Tom Mahan
PO Box 587
Groton, SD 57445

5905-3

Dear Mr. Mahan:

I am writing in regard to your Water Right No. 5905-3. The water right authorizes diversion of 0.56 cfs (approx. from 250 gpm) from a holding pond, for the irrigation of 30 acres in portions of Section 19 & 20, all in T123N, R60W.

In reviewing your 2025 irrigation questionnaire, we have found discrepancies in the amount of water used and have some concerns. Enclosed is a copy of your questionnaire for reference purposes.

Water Right No. 5905-3 allows you to use up to 2 acre-feet (ac-ft) (24 inches) of water, per acre, per year. On the questionnaire you reported substantially more water use. The following information is what was reported and what is authorized:

- 23 acres irrigated
- Reported water use – 549.14 ac-ft of water (approximately 286 inches)
- Authorized water use – 46 acre-feet (23 acres x 2 ac-ft per year)

We realize that water use depends greatly on climactic conditions and may vary year to year. However, it is very rare that irrigators come close to the 24 inches per acre that is authorized. Typical water use is between 8 and 12 inches per acre. Often, irrigators do not keep track of their days or hours actually pumped and estimate numbers for the questionnaires in an effort to get them completed and back in on time. While we appreciate returning the forms in a timely manner each year, we need the forms to reflect accurate information to ensure everyone is limiting their use to the amount of water appropriated to them.

The information we receive each year from irrigators across the state is very valuable. The water use data supplied by irrigators is one of the tools we use to help determine whether an aquifer or stream is nearing full appropriation.

If you do in fact apply as much water as claimed on your questionnaire, you are exceeding the limits of your water right and will have to reduce your discharge to stay within the authorized limit. If you simply estimated your water use, we ask that you please ensure the information reported is as accurate as possible. As stated before, the information you provide to us is very valuable. If you have any questions, please contact me.

Sincerely,

Shannon Konst
Water Rights Program
605 773-3352
Shannon.konst@state.sd.us