

WATER PERMIT NO. 6048-3

Name of Applicant: **City of Brookings**

Address: **525 Western Ave, Brookings SD 57006**

Phone: **605 692-6325**

Amount of Water Claimed: **2420 acre-feet**

Total Acres: **NA**

Source of Water Supply: **groundwater**

Water to be used for: **municipal use**

County: **Brookings**

Type of Waste Disposal System:

Location:

PRIORITY Date Received: **12-19-1997**

Fee: **\$700**

Corrected Application Received: **2-10-1998**

Period of Annual Use: **January 1 - December 31**

Remarks: **Withdrawal from Future Use Permit No. 1598-3**

Diversion Point: **N 1/2 NE 1/4**

Sec 32-T110N-R49W

Land to be Irrigated: **NA**

Depth of Well: **65 feet deep**

Well Driller:

Remarks: **well not constructed**

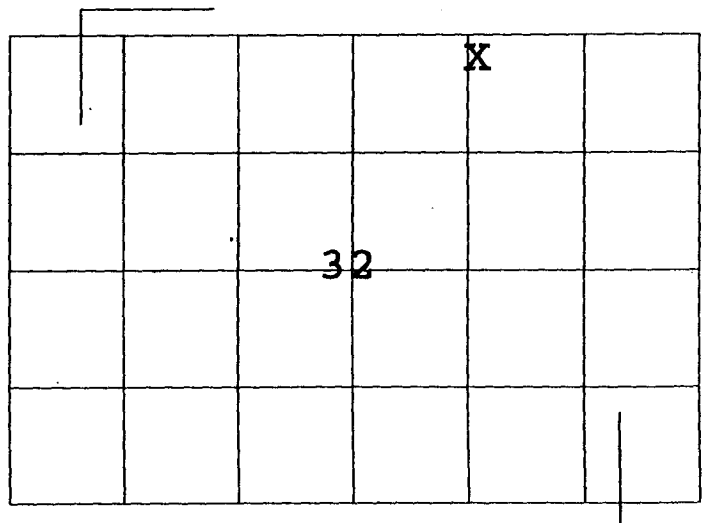
Type of Map: **plat**

Prepared by: **James G Nass, PE**

Reviewed and the Number Assigned on: **2-11-1998**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



**SOUTH DAKOTA
WATER PERMIT NO. 6048-3**

Date of first receipt of application December 19, 1997.

Date of return to applicant for corrections, amendments or changes December 22, 1997.

Date of receipt of corrected application February 10, 1998.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 6048-3 to Brookings Municipal Utilities, 525 Western Ave, Brookings SD 57006 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. 6048-3 authorizes construction and placing to beneficial use 3.34 cubic feet of water per second (2,420 acre-feet annually) from one well (Big Sioux-Aurora Aquifer) 65 feet deep located in the N ½ NE ¼ Section 32-T110N-R49W. The water is appropriated and reserved by Future Use Permit No. 1598-3.
2. The water appropriated shall be used for the purpose of supplying water to the City of Brookings and may not exceed the amount of water needed for beneficial use for municipal purposes.
3. The water is to be used during the following described annual period: January 1 – December 31.
4. The date of approval of Permit No. 6048-3 is April 20, 1998.
5. The date from which applicant may claim right is June 28, 1968 (established by Future Use Permit No. 1598-3).
6. One-fifth of the construction is to be completed on or before October 20, 2000.
7. All construction is to be completed on or before April 20, 2003.
8. Water is to be put to beneficial use on or before April 20, 2007.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

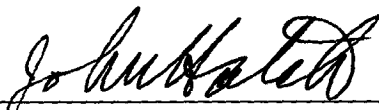
1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 6048-3 shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.

(continued)

Water Permit No. 6048-3
Brookings Municipal Utilities
Page 2

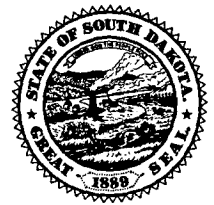
3. Permit No. 6048-3 authorizes a total annual diversion of 2,420 acre-feet of water annually from the Big Sioux-Aurora Aquifer.
4. Brookings Municipal Utilities shall report to the Chief Engineer annually the amount of water withdrawn each year from the Big Sioux-Aurora Aquifer.

WATER MANAGEMENT BOARD

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

JUN 24 1998

date



**NOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USE**Date October 21, 1999

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

FROM: Jim Nass Brookings Municipal Utilities
(name) 525 Western Avenue (address)

Brookings SD 57006 605-692-6325
(city) (state) (zip) (phone)

I have completed the construction of the water diversion system and I have put the water to beneficial use to the maximum extent it is going to be used. I have not exceeded the amounts specified in Water Permit No. 6048-3.

Water Permit No. 6048-3 states that the diversion system is to be constructed by April 20, 2003, and that the water is put to beneficial use by
(date)

April 20, 2007
(date)

The diversion system was completed on October 21, 1999.
(date)

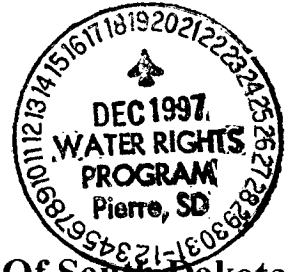
Applying the water to beneficial use was completed on October 21, 1999.
(date)

You may schedule an investigation so that the Water License may be issued.

Jim Nass
(signature)

Mail to:
Water Rights Program
Joe Foss Building
523 E. Capitol
Pierre, SD 57501-3181
(605) 773-3352

(office use only)
No. 6048-3 Hydrologic Unit 10170202
Basin Sioux River
Newspaper Brookings Register, Brookings, SD



Application For Permit To Appropriate Water Within The State Of South Dakota

Check use(s) of water:

☒ Municipal	☐ Suburban Housing	☐ Recreational	☐ Institutional
☐ Rural Water System	☐ Commercial	☐ Fish & Wildlife	☐ Geothermal Heat
☐ Domestic (over 18 gpm)	☐ Industrial	☐ Other	

Type of Application: New Vested Right (Use predates Mar 2, 1955) Future Use Reservation
(check one) ✓ Place to Beneficial Use Water Reserved by Future Use Permit No. 1598-3
Amendment/Correction to Permit No. _____

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

1. Name of Applicant Brookings Municipal Utilities Phone 605-692-6325
City of Brookings
 (check one) ☒ Owner ☐ Tenant/lessee
 Mailing Address 525 Western Avenue State SD 57006
 (Street, RR. or Box) (Zip Code)

2. Amount of water claimed 3.34 *CFS or 1500 **GPM 2420 ***AF
 (*Cubic Feet per Second) (**Gallons per Minute) (***Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Big Sioux: Aurora Aquifer

4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) Additional Well
in City Owned Land ^{N/4} NE 1/4, Sec 32, T110N-R49W
County Brookings

5. County or counties where water will be used Brookings

6. Annual period during which water is to be used Yearly - Municipal Well

7. Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

See enclosed

STATE OF SOUTH DAKOTA)
County of Brookings SS

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)

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

Signed James Kas
8th day of December 1997.

Becky Peterson
Notary Public

(type or print in ink)



1. Well Information - Proposed Construction

- a) Drill Hole Diameter 42" Depth 65' → 70'
- b) Casing Type Steel Diameter 24" Thickness _____
- c) Screen Type Stainless Diameter 24" Thickness _____
- d) Gravel Pack 55' → 60' Length of Gravel Pack Variable
- e) Depth to Top of Water Bearing Material 3' → 7'
- f) Depth to Water (ground surface to water level) 5' → 7'
- g) Distance to nearest existing domestic well:
- On applicants property 400' → 600' On property owned by others 1/2 Mile +

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) _____
- b) System Capacity (gallons) _____ Year Constructed _____
- c) Connected to the City of _____ Sanitary System _____

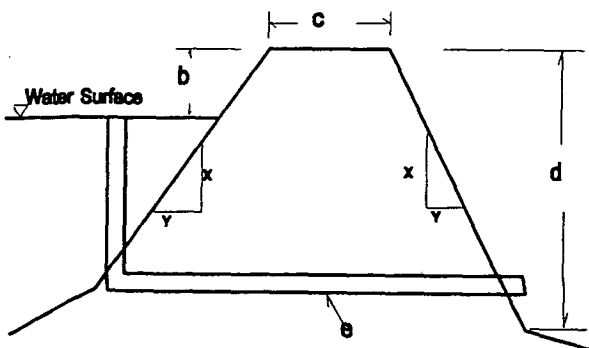
3. Dugout Information

- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

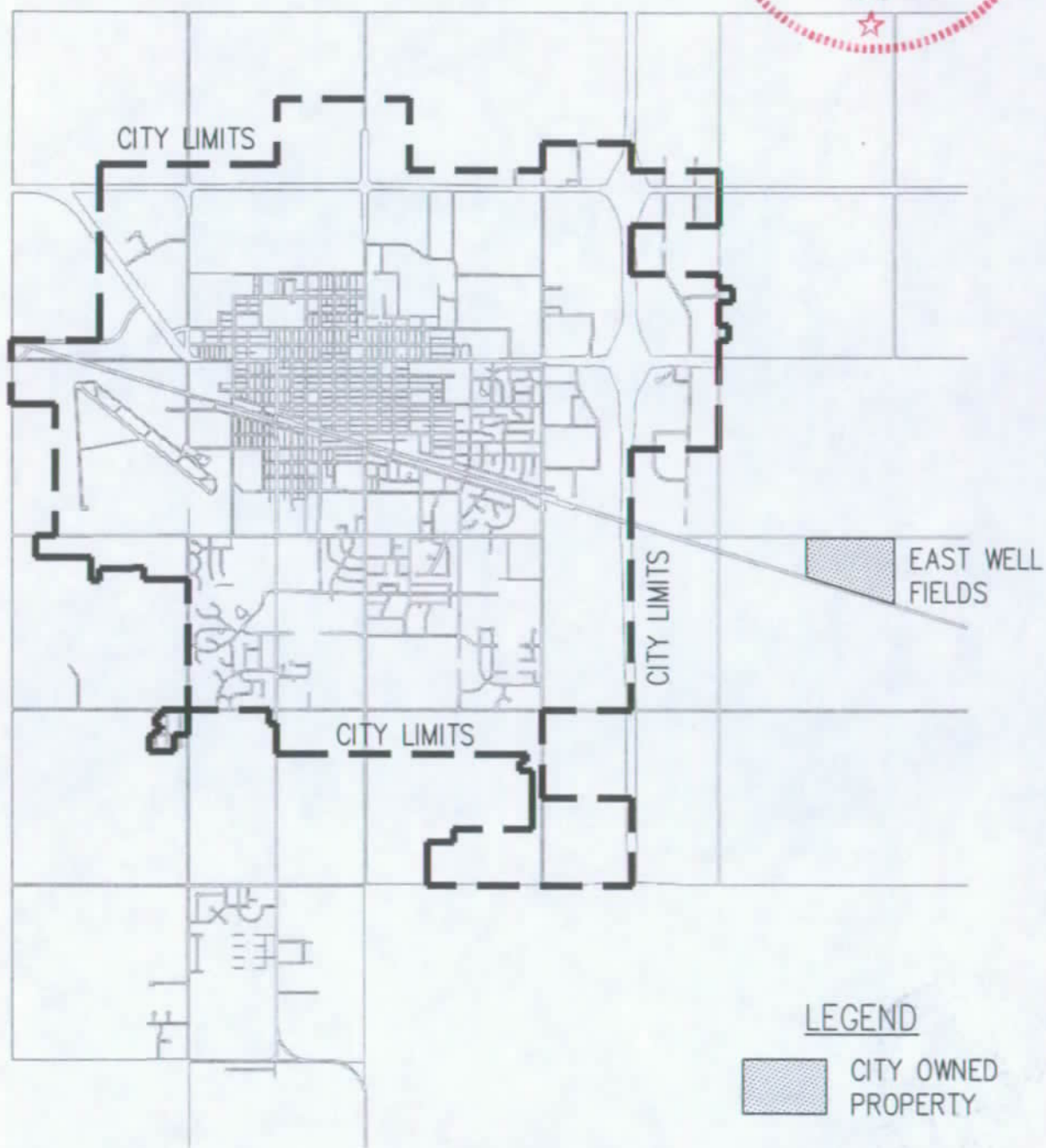
4. Water Storage Dams

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 _____
Upstream _____
Downstream _____
- h) Surface Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres



SITE PLAN OF EAST WELL FIELDS FOR THE CITY OF BROOKINGS

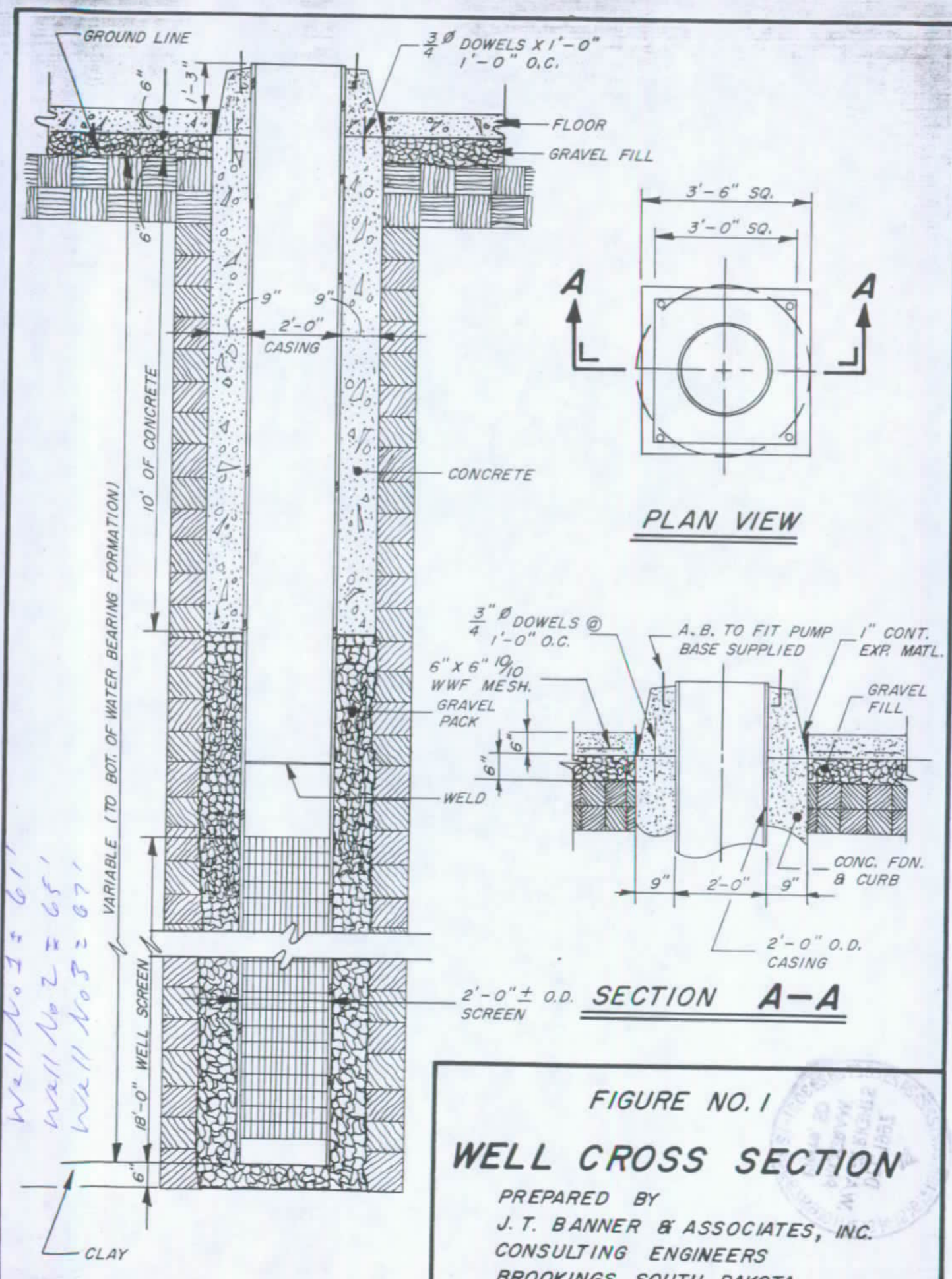


FIGURE NO. 1

WELL CROSS SECTION

PREPARED BY

J. T. BANNER & ASSOCIATES, INC.

CONSULTING ENGINEERS

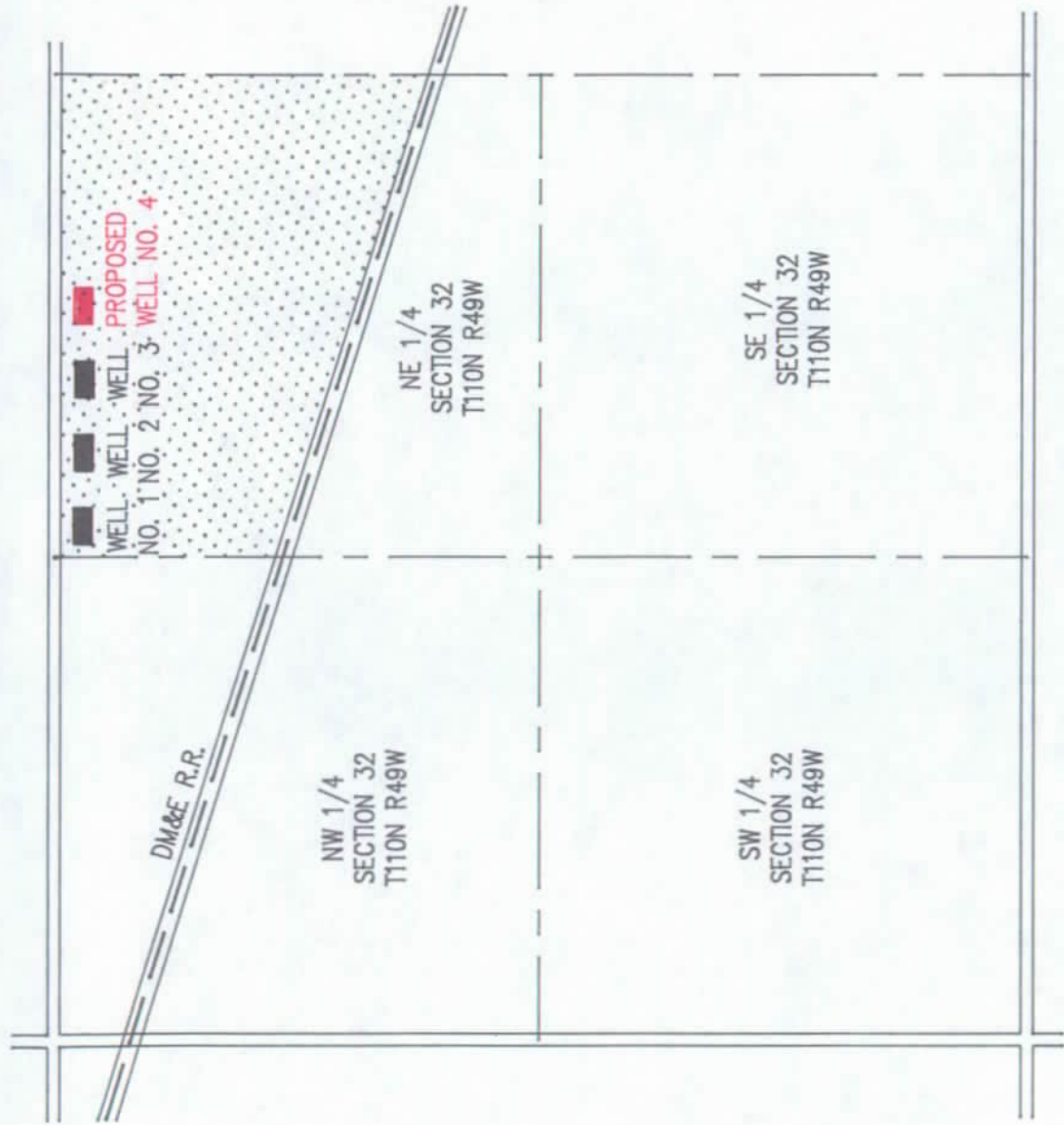
BROOKINGS, SOUTH DAKOTA



LEGEND



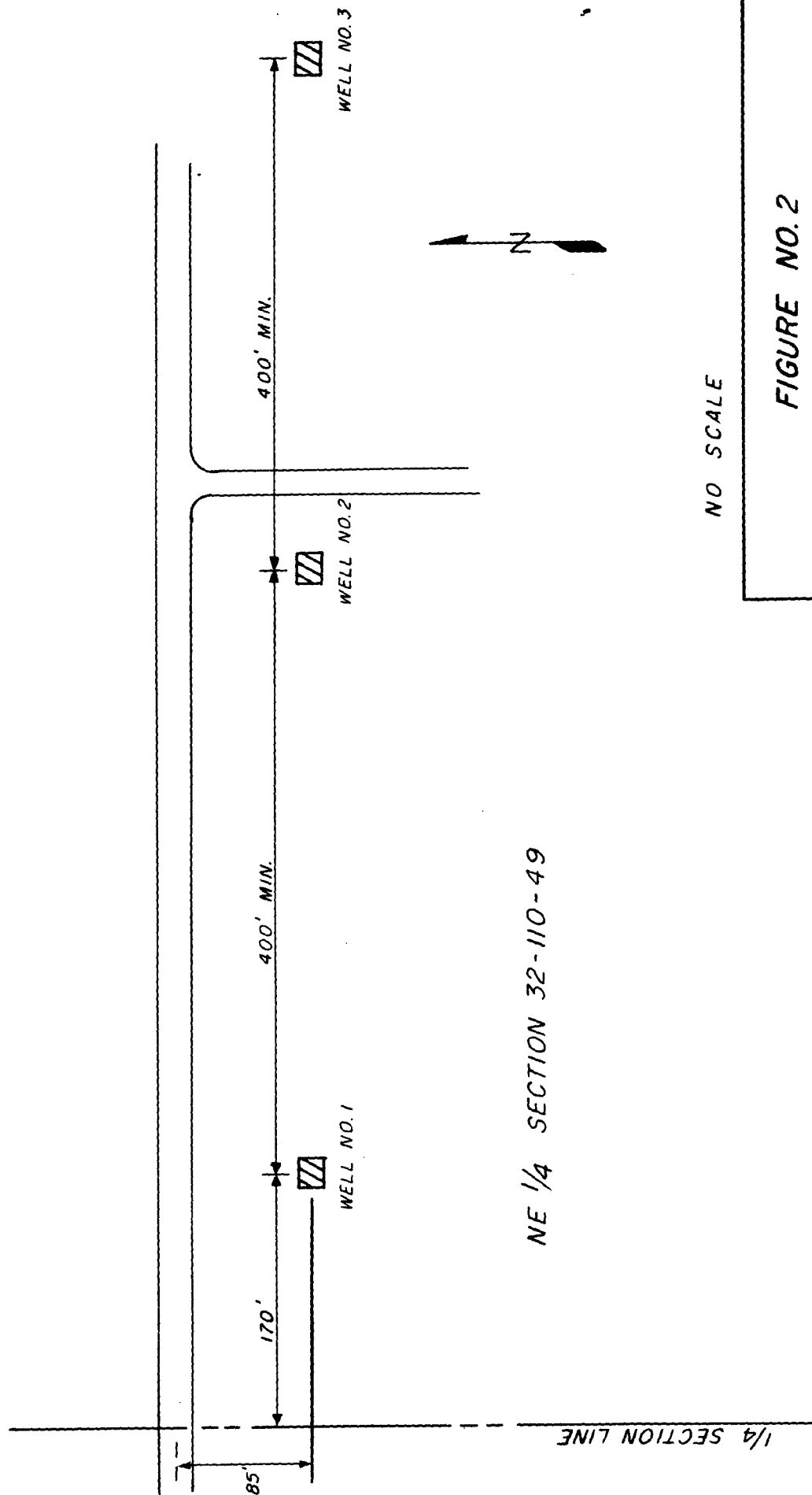
CITY OWNED
PROPERTY



DRAWN BY: RLS CHECKED BY: N/A ENGR SUP'V: JCN	SUPV APP'D: N/A MANAGER APP'D: ALJ	DATE DRAWN: 12/10/97		DRAWING NUMBER:	
		SCALE: 1"=1000'		WW1597	
		SHEET 2 OF 2			

SITE PLAN OF EAST WELL FIELDS
FOR THE CITY OF BROOKINGS

6048-3



NO SCALE

FIGURE NO. 2

WELL LOCATION MAP

PREPARED BY
J. T. BANNER & ASSOCIATES, INC.
CONSULTING ENGINEERS
BROOKINGS, SOUTH DAKOTA

Project Specifications for the Three (3) existing Wells - (1979)

3. - WATER SUPPLY WELL

3.01 SCOPE: The work to be done under this section of the specifications includes the furnishing of all transportation and mobilization, labor, tools, supplies, plant, equipment and appurtenances required to construct three permanent water supply production wells, including pump bases and all appurtenances required to complete the items of work.

3.02 LOCATION: The proposed water supply wells to be constructed under these specifications are located about two (2) miles east of the City of Brookings and one mile south of U.S. Highway No. 14. The more exact location is shown on the attached map of the area. The site on which the drilling will take place is property of the City.

3.03 LOCAL CONDITIONS: Test holes have been drilled within the immediate area of the proposed well sites by the South Dakota Geological Survey. The drilling logs of these tests indicate the following formation depths.

0- 8	Clay, black silty	Static water level 8'
8-24	Sand and gravel	
24-50	Sand, coarse, fine gravel	
50-56	Gravel and sand	
56-64	Clay, dark blue-gray pebbly, (till)	

Some variation from this will occur at each location. If more detailed formation data is desired, the Contractor may contact the Engineer or the South Dakota Geological Survey.

Water for drilling may be obtained by installing a temporary well at the site, or by hauling water from the City of Brookings. Any cost of drilling a temporary well, obtaining and hauling water from the City of Brookings, removing, filling and disinfecting the temporary well shall be considered as an incidental to the contract and no separate payment will be made for these items.

The information provided herein regarding sub-surface conditions is intended to assist the Contractor in preparing his bid. However, the Owner does not guarantee its accuracy and the Contractor shall satisfy himself regarding all local conditions affecting his work by personal investigation and neither the information contained in this section nor that derived from maps or plans or from the owner or his agents or employees shall act to relieve the Contractor from any responsibility hereunder or from fulfilling any and all of the terms and requirements of his Contract.

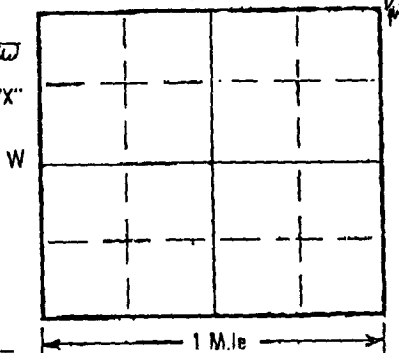


SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location NE 1/4 NE 32 Twp 110N Rg 49W
 County Brookings

Please mark well location with an "X"



Well Completion Date

11-6-98

LOCATION:

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

PROPOSED USE:

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

METHOD OF DRILLING:

Reverse rotaryCASING DATA: ☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT DIAMETER FROM TO HOLE DIAMETER
94.62 LB/FT 24 IN 42 FT 6' 48 IN
 _____ LB/FT _____ IN _____ FT _____ FT _____ IN
 _____ LB/FT _____ IN _____ FT _____ FT _____ IN

GROUTING DATA

Grout Type No. of Sacks Grout Weight From To
Cement 51 16 lb./gal 24 ft. 0 ft.
Benlate 73 _____ lb./gal 29 ft. 24 ft.

Describe grouting procedure by tremie methodSCREEN: ☐ Perforated pipe ☒ ManufacturedDiameter 24 IN Length 18 FEETMaterial Stainless SteelSlot Size 0.3 Set From 42 Feet to 60 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☐ NO, Why Not?200 PPMChlorine

Laboratory sent to for water quality analysis _____

Well Owner: Brookings Utilities
 Business Name: Brookings Municipal Utilities
 Address: 525 Western Avenue, P.O. Box 512
Brookings, SD 57006

WELL LOG:

DEPTH

FORMATION	FROM	TO
<u>Clay</u>	<u>0</u>	<u>7</u>
<u>Sand, gravel and boulders</u>	<u>7</u>	<u>60</u>
<u>Clay</u>	<u>60</u>	<u>62</u>

STATIC WATER LEVEL 15 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☒ Bailed☐ Other

Describe: The well was developed with a double disc surge block then test pumped for 25 hours

Pumping Level Below Land Surface

36.4 ft. After 25 Hrs. pumped 1225 GPM

_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate _____ GPM

REMARKS

This well was drilled under license # 513

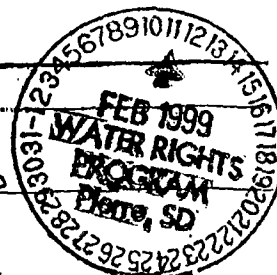
And this report is true and accurate.

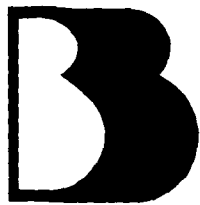
Drilling firm LAYNE - WESTERN CO

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder: _____

Date: _____





BROOKINGS municipal utilities

525 Western Ave. • P.O. Box 588
Brookings, S.D. 57006
(605) 692-6325

December 18, 1997



Water Rights Program, DNER
Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

RE: Application to Appropriate Water from Future Use No-1598-3.

Water Management Board:

Please find enclosed the permit application forms and sketches to detail our intentions as referenced above.

We intend to construct an additional "NEW WELL" to our system in the Big Sioux:Aurora Aquifer. This well would take water from the Future Use Permit No 1598-3 that is held by the City of Brookings in that Aquifer.

We are sending sketches with this application that should outline what we intend to do as well as show the location of where we wish to construct this project.

The EXACT location of the new well would be determined at the time of construction as per the results of the Test Borings etc-But it will be in the same vicinity as our present system of wells. The land where the existing wells are located is owned by the City of Brookings. (About 90 Acres).

The amount of water we wish to appropriate from Future Use Permit No 1598-3 is 1,500 gpm or 2,420 Acre-Feet per Year.

If we need to furnish you with any further information to complete this process, please contact us at 692-6235.

Sincerely,

Jim Nass P. E.
Utilities Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

December 22, 1997

James Nass
Brookings Municipal Utilities
PO Box 588
Brookings SD 57006

Dear Mr. Nass:

Thank you for submitting the *Application for a Permit to Appropriate Water* for the City of Brookings. In order to complete the application, the filing fee is required.

The application filing fee is based on the amount of water claimed. The letter submitted with the application indicates the city wishes to appropriate 2,420 acre-feet per year which is 1,500 gpm pumped continuously. The application filing fee for 2,420 acre-feet will be \$700.00. As a general rule, we figure a 60% pumping rate. Sixty percent of 2,420 acre-feet would be 1,452 acre-feet. If you wish to amend the application to 1,452 acre-feet, the filing fee will be \$500.00.

Upon receipt of the application fee, further processing of the application will continue. If you have any questions, please contact me.

Sincerely,

Karen Schlaak
Water Rights Program
605 773-3352

REPORT ON WATER PERMIT APPLICATION NO. 6048-3
for the City of Brookings
March 12, 1998

Application No. 6048-3 proposes to construct and place to beneficial use 3.34 cfs (2,420 acre feet) from one well approximately 65 feet deep located in the N 1/2 NE 1/4 of Section 32, T110N-R49W in Brookings County. This water was appropriated and reserved by Future Use Permit No. 1598-3. The water will be used to supply the City of Brookings.

AQUIFER - BIG SIOUX AURORA (BS-A)

The Big Sioux Aurora aquifer is a surficial outwash (sand and gravel) which is under unconfined or water table conditions in this area. The Big Sioux Aurora aquifer underlies 39,300 acres and contains an estimated 165,060 acre feet of recoverable water in storage in Brookings County (Hedges, 1982). The entire Big Sioux aquifer underlies 540 square miles and contains an estimated 2.0 million acre feet of water in storage in Brookings and Kingsbury Counties (Hamilton, 1989). The aquifer is hydraulically connected to the Big Sioux River, and in this area to Medary and Deer Creeks which can act as recharge or discharge zones for ground water. Ground water movement is from northeast to southwest toward the Big Sioux River.

The Water Rights Program monitors two observation wells BG-79D and BG-77R located one mile north and one mile south of this application respectively. Water levels for these wells show good response to climatic conditions, that is, rising water levels during wet years and gradually declining water levels during dry years. Hydrographs for these two wells are included with this report. In general, the water level record indicates that the aquifer is capable of sustaining additional withdrawals (Water Rights, 1998).

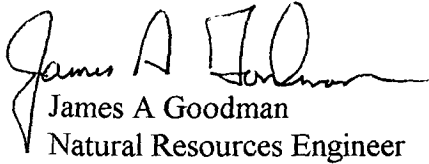
REVIEW OF EXISTING WATER PERMITS/RIGHTS

The only other existing water permit/right in this area is Water Right No. 3979-3 which allows a diversion rate of 6.69 cfs from three wells located in the NW NE of Section 32. These are also for the City of Brookings. This well, #4, will be approximately 400 feet east of an existing city well. Interference is not a concern. Drawdown will result from pumping but this should not be significant. The city can control withdrawals and therefore manage the amount of drawdown created in the area. The nearest existing water permit/right other than the city is over one mile from this application.

CONCLUSIONS

1. Water is available from the Big Sioux Aurora aquifer.
2. The aquifer is under water table conditions and drawdown created by pumping should not adversely affect the existing wells in the area. The city will have control of the diversions and will be able to manage withdrawals to minimize potential impacts.
3. The water for this application was reserved by Future Use Permit No. 1598-3. Approval of this application will leave 2106 acre feet remaining in future use permit No. 1598-3.

4. The well authorized by this application must be constructed in accordance with SD Well construction Standards.



James A Goodman
Natural Resources Engineer

BIBLIOGRAPHY

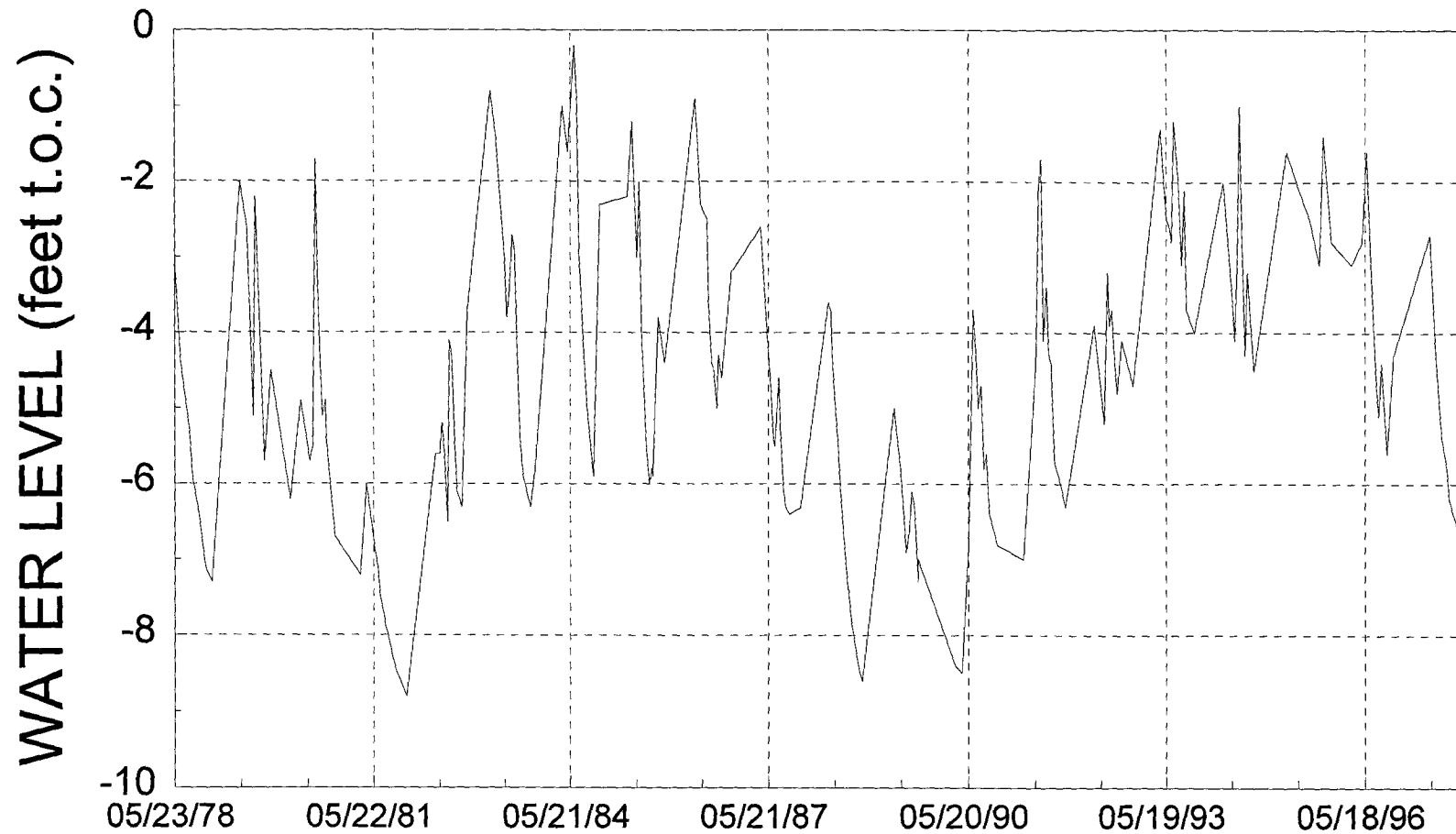
Hedges, L.S., etal, 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, SD and Iowa, for US Army Corps of Engineers, SD DENR, SDGS, Vermillion, SD, 57069.

Hamilton, L.J., 1989, Water Resources of Brookings and Kingsbury Counties, South Dakota, USGS WRI 88-4185, USGS, Huron, SD, 57350.

Water Rights, 1998, Unpublished Observation Well Data for Brookings County, SD DENR, Division of Environmental Services, Water Rights Program, Pierre, SD, 57501.

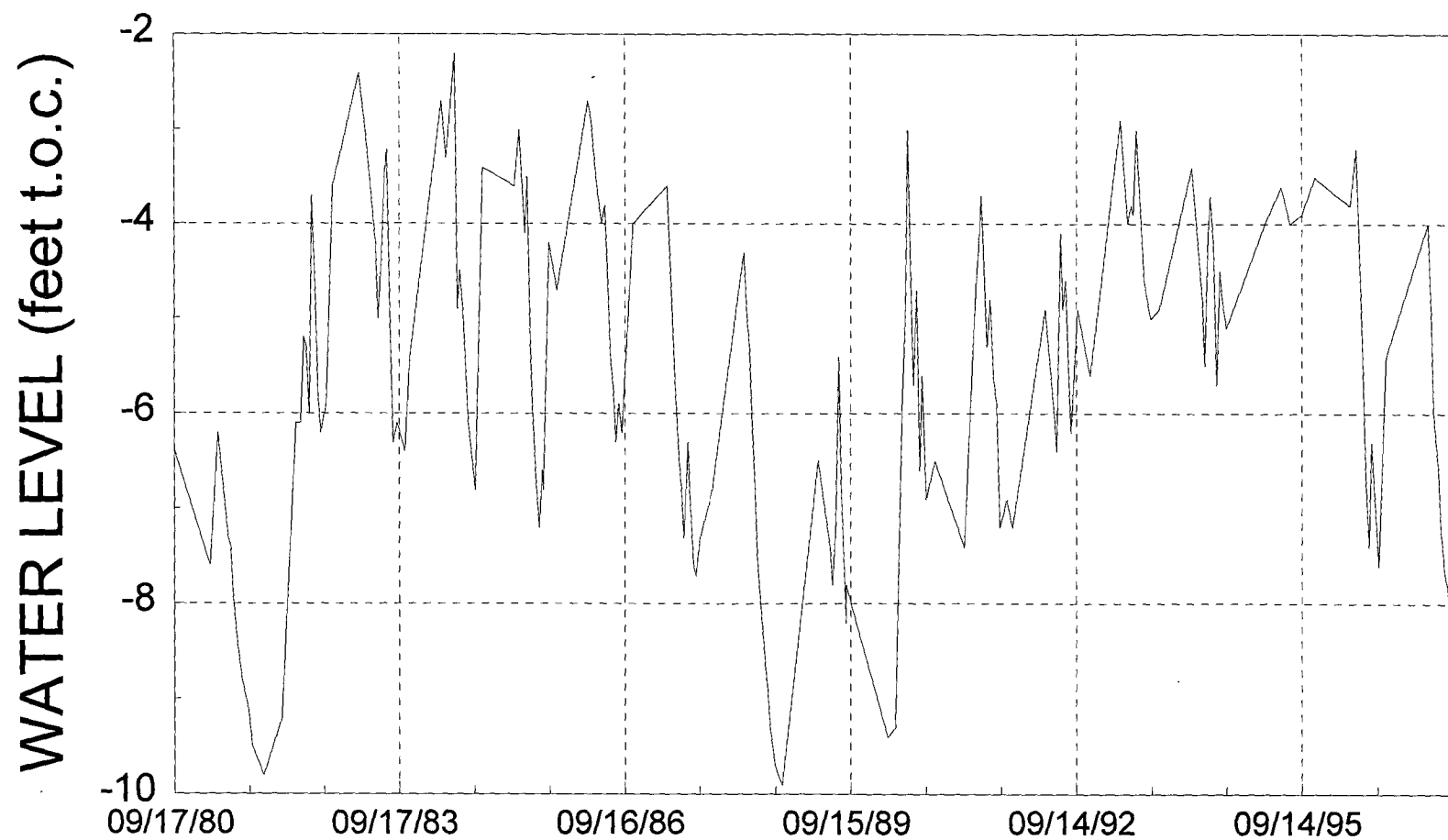
WATER RIGHTS OBSERVATION WELL

BG-77R



WATER RIGHTS OBSERVATION WELL

BG-79D



**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 6048-3, City of Brookings**

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. 6048-3, City of Brookings, c/o James Nass, 525 Western Ave., Brookings, SD 57006.

The Chief Engineer is recommending APPROVAL of Application No. 6048-3 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 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 well authorized by Permit No. 6048-3 shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. Permit No. 6048-3 authorizes a total annual diversion of 2,420 acre feet of water annually from the Big Sioux:Aurora Aquifer.
4. ~~The City of Brookings~~ ^{Municipal Utilities} shall report to the Chief Engineer annually the amount of water withdrawn each year from the Big Sioux:Aurora Aquifer.

See report on application for additional information.



JOHN HATCH, Chief Engineer
March 24, 1998



**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.

March 24, 1998

City of Brookings
%James Nass
525 Western Ave.
Brookings, SD 57006

Dear Mr. Nass:

Water Permit Application No. 6048-3 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 Brookings Register printed at Brookings, SD (Ph # (605) 692-6271). 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.



March 24, 1998

Brookings Register
P.O. Box 117
Brookings, SD 57006-0117

ATTENTION: Legal Department

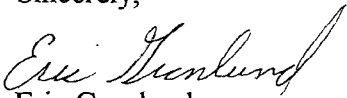
Enclosed is a Notice of Application No. 6048-3 to Appropriate Water to be published twice. Please publish the first notice on April 1, 1998, with the second publication 7 days later.

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 Brookings, %James Nass, 525 Western Ave., Brookings, SD 57006 (Ph # (605) 692-6325).

Please send the Water Rights Program the first publication immediately. The publication is checked for accuracy so any corrections can be made in the second publication. You may use the form below or fax a copy of the first publication. Our fax number is 605 773-4068. Publication errors can invalidate the public notice.

After the second publication, **please send us an affidavit or use the enclosed Proof of Publication form.** The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

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

No. 6048-3

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

Date _____

We are in receipt of your letter of March 24, 1998 enclosing Notice of Application No. 6048-3 to Appropriate Water 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 April 1, 1998, with the second publication 7 days later. The applicant is responsible for payment.

**NOTICE OF APPLICATION NO. 6048-3
to Develop Reserved Water**

Notice is given that Brookings Municipal Utilities, City of Brookings, 525 Western Avenue, Brookings SD 57006 has filed an application for a water permit to construct and place to beneficial use 3.34 cubic feet of water per second (2,420 acre feet) from one well (Big Sioux-Aurora Aquifer) 65 feet deep located in the N 1/2 NE 1/4 Section 32-T110N-R49W. This water was appropriated and reserved by Future Use Permit No. 1598-3. The water will be used to supply the City of Brookings.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6048-3 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. 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 April 20, 1998.

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.

Form 8



PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County of Brookings) SS

I, Nancy P Skyberg

certify that the attached printed Notice was taken
from the Brookings Register

printed and published in Brookings

County of Brookings and

state of South Dakota. The notice was published

in the newspaper on the following two dates:

April 1, 1998

April 8, 1998

Cost of Printing forty dollars and
forty-six cents \$40.46

Nancy P Skyberg
(Signature)

Legal Ad Coordinator
(Title)

4-14-98
(Date Signed)

Legal 236, 2x, 4/1, 8
NOTICE OF APPLICATION NO. 6048-3

to Develop Reserved Water
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**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

JUN 24 1998

Brookings Municipal Utilities
%James Nass, Utilities Engineer
525 Western Ave.
Brookings, SD 57006

Dear Mr. Nass:

Enclosed is Water Permit No. 6048-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Also enclosed is Form 10, Notice of Completion of Works and Application of Water to Beneficial Use, which you are to complete and submit to the Chief Engineer when you have completed the system and/or have put the water to beneficial use. An inspection can then be scheduled so that the Water License may be issued, thus completing your acquisition of a Water Right.

Very truly yours,

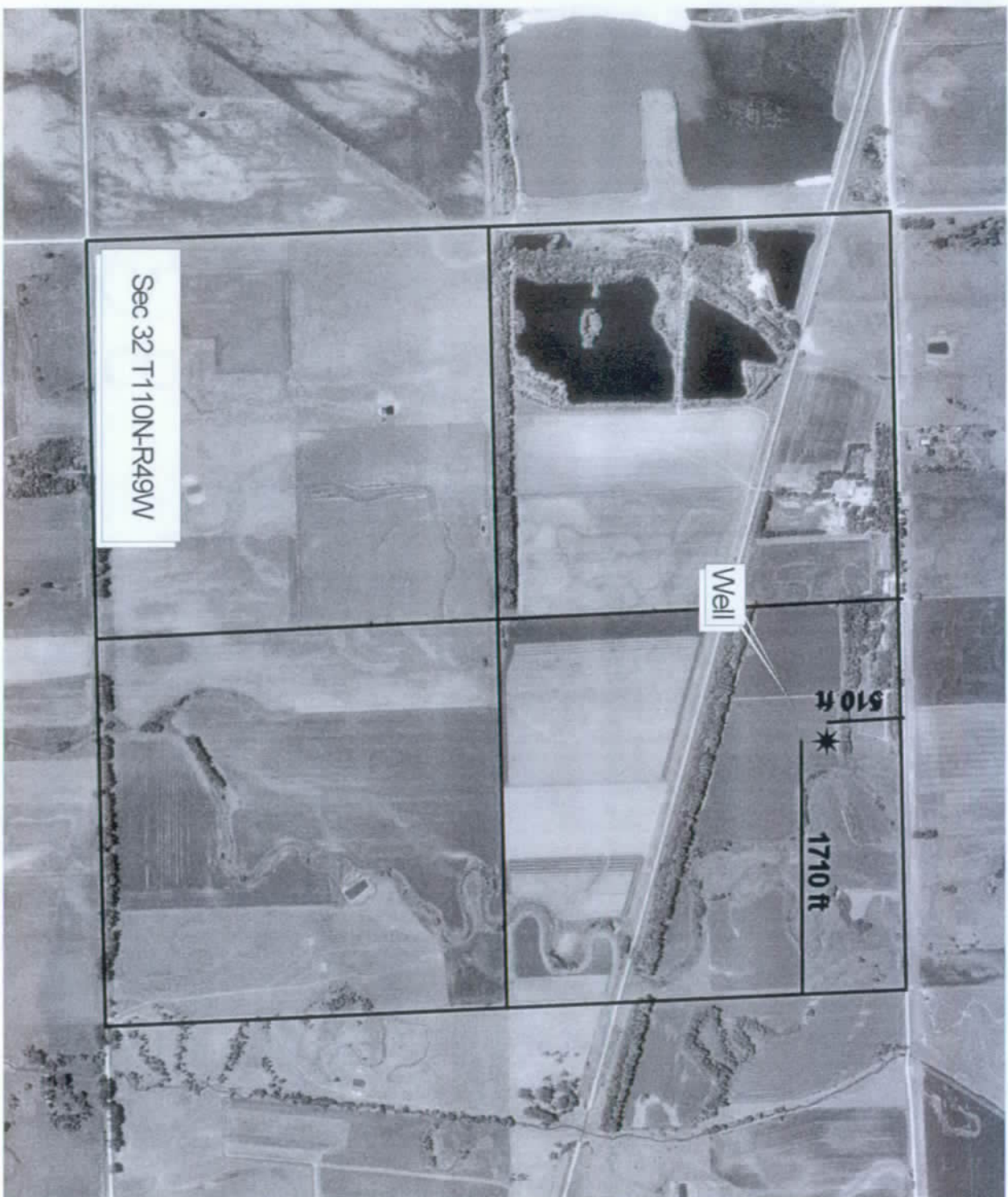
JOHN HATCH, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

PLEASE NOTE: Certain changes may be made to your water permit usually without affecting the priority date. The location of a point of diversion may be changed or additional points of diversion may be approved if the water source remains unchanged; no additional water is appropriated; and, if irrigating, no additional land is irrigated. The change may be allowed without application or publication, if the Water Rights Program is contacted and the chief engineer makes a finding that the change does not increase the potential for interference with existing diversions.

A new water permit application is required to change water sources, increase the permitted diversion rate, or increase the irrigated acreage. If the application is approved, the water permit will receive a new priority date.

No. 6048-3



Mark D. Rath 5/26/2000
Natural Resources Engineer
SD Water Rights Program

REPORT ON INSPECTION OF PERMIT NO. 6048-3

DATE OF INSPECTION: May 23, 2000

Contact Person & Address: Jim Nass, Brookings Municipal Utilities, 525 Western Ave, Brookings SD

DIVERSION POINT LEGAL LOCATION: from the NE corner of Section 32 T110N-R49W: 1710 feet west and 510 feet south. with a longitude of -96.73505 and a latitude of 44.29508

WATER SUPPLY Source: ground water (Big Sioux Aurora)

Well Information:

- | | |
|---|-------------------------------------|
| 1) Well Drilling Firm: <u>Layne-Western</u> | 2) No. of Wells <u>1</u> |
| 3) Depth(s) <u>60</u> feet | 4) Well log is available <u>yes</u> |

Casing:

- | | |
|------------------------------|--------------------------|
| 1) Diameter <u>24</u> inches | 2) Length <u>42</u> feet |
| 3) Type <u>steel</u> | |

Screen:

- | | |
|--------------------------------------|-------------------------|
| 1) Type <u>stainless</u> | 2) Length <u>6</u> feet |
| 3) Static water level <u>15</u> feet | |

Pump\ Motor:

- | | |
|-----------------------------------|------------------------------------|
| 1) Pump Make <u>Layne-Western</u> | 2) Pump Model <u>?</u> |
| 3) Capacity <u>1300</u> GPM | 4) Motor Make <u>US Electrical</u> |
| 5) Motor Model No. <u>324TP</u> | 6) Horsepower rating <u>40</u> hp |

DISTRIBUTION LINES OR CANALS:

- | |
|--|
| 1) Type <u>Municipal distribution system</u> |
|--|

PERMIT QUALIFICATIONS AND REGULATIONS:

- | |
|--|
| 1) Special qualifications to permit being abided by <u>yes</u> |
| 2) All structures, wells and lands on map <u>yes</u> |

COMMENTS: the balance of the acre-feet, 319 ac-ft, should revert back to future use authorized by No. 1598-3



Mark D. Rath
Natural Resources Engineer
DENR, Water Rights Program

5/30/00

Date

Permit No. 6048-3
Big Sioux River - Water District

Report Of Examination Of Works

On, May 23, 2000, I made a thorough examination of the water use system constructed by Brookings Municipal Utilities of 525 Western Ave, Brookings SD holder of Permit No. 6048-3, bearing the priority of June 28, 1968 authorizing the diversion of 3.34 cu. ft. per second and the annual volume of 2420 acre-feet of the waters of ground water (Big Sioux Aurora) for municipal use purposes, in Brookings County.

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

A. Works used to divert the water:

A Layne pump

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

Municipal distribution system

The system is in the following condition good. The point of diversion is located from the NE corner of Section 32 T110N-R49W: 1710 feet west and 510 feet south, with a longitude of -96.73505 and a latitude of 44.29508. The works are capable of diverting and conveying to the place of use 2.90 cu. ft. per second of water at an annual amount of 2101 acre-feet of water which is to be used for municipal use. Water has been put to beneficial use and the license should be issued for 2.90 cfs and 2101 acre-feet annually.

Applicable permit qualifications have been complied with: yes

Exceptions to compliance are: none



Mark D. Rath
Natural Resources Engineer
DENR, Water Rights Program

5/30/00

Date

Water Rights Program - File Documentation

NAME: Brookings Municipal Utilities

ADDRESS: Brookings SD

DATE: 8-10-2000 **COUNTY:** BK **TELEPHONE:**

RE: Future Use Permit No. 1598-3

COMMENTS:

Water Permit No. 6048-3 authorized:	3.34 cfs	2420 AF annually ¹
Investigation found system capable of diverting:	<u>- 2.90 cfs</u>	<u>2100 AF annually ²</u>
Reverting back to future use:	0.44 cfs	320 AF annually

¹ Full time pumping = 3.34 cfs x 724 $\approx$ 2420 AF annually

² Investigation found system pumping 2.90 cfs
Full time pumping = 2.90 cfs x 724 $\approx$ 2100 AF annually

Karen Schlaak

Karen Schlaak
Environmental Scientist



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

August 11, 2000

6048-3

Brookings Municipal Utilities
Jim Nass
525 Western Ave
Brookings SD 57006

Dear Mr. Nass:

On May 23, 2000 the investigation of your city's water use system, including the extent of application of water to beneficial use, as developed under Water Permit No. 6048-3, was completed by Mark Rath, a staff engineer with our program. The final water right document, the water license, can now be issued.

State law requires that we charge a \$50.00 fee for the investigation and issuance of the water license. Upon receipt of the \$50.00 fee, we will complete processing the water license. The check or money order for the fee should be made payable to the "Water Rights Program". Enclosed is an invoice for that amount.

Your licensed water right will be similar to a property right that can not be lost as long as the water use continues and you abide by the permit requirements.

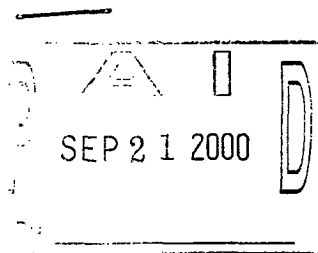
If you have any questions regarding the water permit, investigation of your water use system or payment of the fee, please contact Genny McMath with our program at (605) 773-3352.

Sincerely,

Karen Schlaak
Karen Schlaak
Water Rights Program

enclosure

48240



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

*Full
200-240.2
(2025)*

* INVOICE *

Invoice No. 20411-8-11

Brookings Municipal Utilities
525 Western Ave
Brookings SD 57006

Water License fee for Water Permit No. 6048-3

\$50.00

PLEASE PAY THIS AMOUNT:

\$50.00

Karen Schlaak
Karen Schlaak
Water Rights Program
(605) 773-3352



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

* INVOICE *

Invoice No. 20411-8-11

Brookings Municipal Utilities
525 Western Ave
Brookings SD 57006

Water License fee for Water Permit No. 6048-3	\$50.00
---	---------

PLEASE PAY THIS AMOUNT:	\$50.00
--------------------------------	----------------

Karen Schlaak
Karen Schlaak
Water Rights Program
(605) 773-3352

RECEIPT

Water Rights Program

South Dakota Department of Environment and Natural Resources

N2 416646

Pierre, September 28, 2000,

RECEIVED OF Brookings Municipal Utilities, 525 Western Ave., Brookings, SD 57006
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. 6048-3

50 00

Fee for Filing Transfer Form _____

Fee for Filing Extension Request _____

Fee for _____

(Any Other Work Provided by Law)

Total

50 00

By Garland Erbe
Chief Engineer

GARLAND ERBE



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

MAY 31 2002

6048-3

Brookings Municipal Utilities
Jim Nass
525 Western Ave.
Brookings, SD 57006

Dear Mr. Nass:

Enclosed is Water License No. 6048-3. This is the final water right document completing your process of obtaining a Water Right. Enclosed is Receipt No. 416646 in the amount of \$50.00 which you paid for the investigation and issuance of the Water License.

As long as you use the water beneficially, as stated in the Water License, State Water Laws provide that you have a continuing right to use the water.

Sincerely,

Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 6048-3

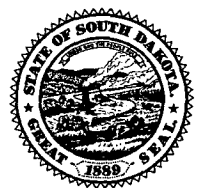
(1) Brookings Municipal Utilities, 525 Western Ave, Brookings SD 57006 made Application No. 6048-3, December 19, 1997 for a water permit to divert 3.34 cubic feet of water per second (2420 acre-feet annually) from groundwater (one well), Brookings County, South Dakota for municipal purposes. Permit No. 6048-3, with a priority date of June 28, 1968 (established by Future Use Permit No. 1598-3) was approved April 20, 1998 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before April 20, 2003 and for the application to beneficial use of said water on or before April 20, 2007.

The permit holder submitted a *Notice of Completion of Works and Application of Water to Beneficial Use* on October 25, 1999. The *Notice* stated the diversion system was completed on October 21, 1999 and the water placed to beneficial use on October 21, 1999.

(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 2.90 cubic feet of water per second (2100 acre-feet annually) for beneficial use. The location of the diversion point is 1,710 feet west and 510 feet south from the northeast corner of Section 32-T110N-R49W (NW ¼ NE ¼).

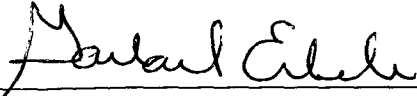
(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use.

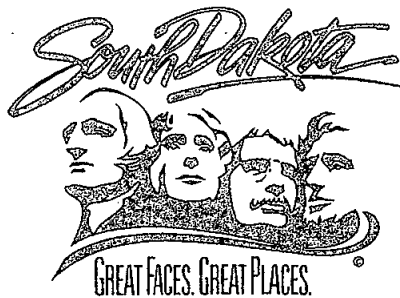
(4) Pursuant to South Dakota Water Law 46-5-30.1 Brookings Municipal Utilities, 525 Western Ave, Brookings SD 57006 the holder and/or owner of Water Right No. 6048-3 is issued a license to appropriate water, the right to use 2.90 cubic feet of water per second (2100 acre-feet annually) from groundwater (one well) with a priority date of June 28, 1968 (established by Future Use Permit No. 1598-3) from the location specified in (2) of this license for municipal use purposes. This license is subject to any limitations or qualifications listed in Water Right No. 6048-3 and subject to South Dakota State Law.



MAY 31 2002

date


GARLAND ERBELE, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

6048-3

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

denr.sd.gov

February 16, 2017

Delvin DeBoer
AE2S
1300 W 57th St, Suite 200
Sioux Falls SD 57107

Dear Mr. DeBoer:

As requested, the following table provides a list of water rights held by the City of Brookings. These tables do not include the irrigation rights, the flood control permit or the permit authorizing the relocation of Six Mile Creek for airport expansion held by the city. Please review the list to see how it compares with the numbers you compiled. If there are discrepancies, please contact me so we can determine the correct amount.

Future Use Permits (reserved water for future development)

No.	Source & Future Use Area	Next Review	Amount Remaining in Reserve
1598-3	Big Sioux:Aurora Aquifer (BS:A) N 1/2 Sec 13-T110N-R50W	Spring, 2019	2,426 acre-feet annually
217-3	Big Sioux:Six Mile Creek Aquifer (BS:SMC) W 1/2 Sec 4, E 1/2 Sec 5, all in T109N-R49W; E 1/2 Sec 32, S 1/2 Sec 33, W 1/2 Sec 28; SE 1/4 Sec 29; all in T110N-R49W	Spring, 2019	1,612 acre-feet annually

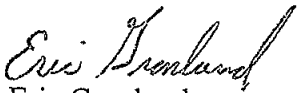
Water Rights

No.	Sources	Diversion Rate	Annual Volume
216-3	BS:SMC	3.85 cfs	2,784 acre-feet annually
674-3	BS:SMC	1.33 cfs	963 acre-feet annually
675-3	BS:SMC	1.33 cfs	963 acre-feet annually
1117-3	BS:SMC	1.44 cfs	1043 acre-feet annually
1296-3	BS:SMC	1.33 cfs	963 acre-feet annually
3979-3	BS:A	6.69 cfs	4,844 acre-feet annually
6048-3	BS:A	2.90 cfs	2,100 acre-feet annually

Please be aware that the table depicts the water rights the city of Brookings holds for municipal use. It does not represent the validity of the water rights. In South Dakota, the right to the use of water can become subject to cancellation due to abandonment and/or forfeiture for nonuse. The review of the city's water rights is to provide a list of the water rights on file and not a review of the past or present capabilities of the wells to produce the amount listed on the water rights. The Water Management Board is the entity entrusted to determine the validity of a water right if the question arises.

If you have any questions, do not hesitate to contact me.

Sincerely,

A handwritten signature in cursive script, reading "Eric Gronlund".

Eric Gronlund

Water Rights Program, DENR

605 773-3352

eric.gronlund@state.sd.us